

STP 8-91WP2-SM-TG

DRAFT - NOT FOR IMPLEMENTATION

SOLDIER'S MANUAL AND TRAINER'S GUIDE

MOS 91W, ASI P2

EAR, NOSE, AND THROAT SPECIALTY

SKILL LEVELS 1/2/3/4

MARCH 2004



HEADQUARTERS, DEPARTMENT OF THE ARMY

DISTRIBUTION RESTRICTION: Distribution authorized to US Government agencies and their contractors only to protect technical and operational information from automatic dissemination under the International Exchange Program or by other means. This determination was made on 16 April 2003. Other requests for this documentation will be referred to Commander, US Army Medical Department Center and School, Department of Training Support (MCCS-HT), Fort Sam Houston, Texas 78234-5078.

DESTRUCTION NOTICE: Destroy by any means that will prevent disclosure of contents or reconstruction of the document.

Summary of Changes

09 Feb 04 – Original draft posted to web site

17 Mar 04 – Procedural changes to 081-830-2001

06 Jul 04 – Procedural changes to 081-830-2001

SOLDIER TRAINING PUBLICATION
No. 8-91WP2-SM-TG

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 17 March 2004

SOLDIER'S MANUAL SKILL LEVELS 1/2/3/4 AND TRAINER'S GUIDE MOS 91W, ASI P2 EAR, NOSE, AND THROAT SPECIALTY

TABLE OF CONTENTS

	<i>PAGE</i>
Table of Contents	i
Preface.....	iii
Chapter 1. Introduction	1-1
1-1. General	1-1
1-2. Training Requirement	1-1
1-3. Battle-Focused Training	1-6
1-4. Task Summary Format	1-7
1-5. Training Execution	1-8
1-6. Training Assessment	1-10
1-7. Training Support	1-11
Chapter 2. Training Guide	2-1
2-1. General	2-1
2-2. Subject Area Codes	2-2
2-3. Duty Position Training Requirements	2-2
2-3. Part One, Section II. Duty Position Training Requirements	2-2
2-4. Critical Tasks List	2-3

DISTRIBUTION RESTRICTION: Distribution authorized to US Government agencies and their contractors only to protect technical and operational information from automatic dissemination under the International Exchange Program or by other means. This determination was made on 16 April 2003. Other requests for this documentation will be referred to Commander, US Army Medical Department Center and School, Department of Training Support (MCCS-HT), Fort Sam Houston, Texas 78234-5078.

DESTRUCTION NOTICE: Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

Chapter 3. MOS/Skill Level Tasks 3-1**Skill Level 1****Subject Area 1: Audiology**

081-830-2000	VALIDATE FUNCTIONING OF THE MANUAL AUDIOMETER.....	3-1
081-830-2004	VALIDATE FUNCTIONING OF THE DOEHRH-HC SYSTEM	3-4
081-830-2001	COMPLETE PURE-TONE AND SPEECH DIAGNOSTIC AUDIOMETRY	3-7
081-830-2002	CONDUCT ACOUSTIC IMMITTANCE MEASUREMENTS.....	3-24
081-830-2008	PERFORM OTOACOUSTIC EMISSION (OAE) SCREENING	3-28
081-830-2005	CONDUCT MONITORING AUDIOMETRY	3-30
081-830-2003	FIT PREFORMED EARPLUGS.....	3-33
081-830-2006	PRODUCE A HEARING AID EARMOLD IMPRESSION	3-36
081-830-2007	REPAIR MINOR HEARING AID DEFICIENCIES.....	3-38

Subject Area 2: ENT Clinic

081-830-2012	PERFORM ANTERIOR PACKING	3-45
081-830-2015	PERFORM CERUMENECTOMY	3-47
081-830-2017	PERFORM EAR IRRIGATION IN AN ENT CLINIC	3-49
081-830-2018	PERFORM KOBRAK CALORIC TEST	3-51
081-830-2021	APPLY MASTOID DRESSING.....	3-54
081-830-2030	PERFORM FOREIGN BODY REMOVAL FROM EAR.....	3-56
081-830-2034	REMOVE NASAL FOREIGN BODY	3-58
081-830-2026	PERFORM SUTURES/STAPLES REMOVAL	3-60
081-830-2027	REMOVE NASAL SPLINTS.....	3-62
081-830-2028	PERFORM TRACHEOSTOMY MAINTENANCE	3-64
081-830-2033	PERFORM ENDOSCOPE MAINTENANCE	3-67

Subject Area 3: ENT Clinic Surgical Procedures

081-830-2022	ASSIST WITH A SURGICAL PROCEDURE IN A CLINIC EXAM ROOM	3-69
081-830-2011	ASSIST WITH CLOSED NASAL FRACTURE REDUCTION	3-71
081-830-2023	ASSIST WITH MYRINGOTOMY	3-73
081-830-2031	ASSIST WITH PERITONSILLAR ABSCESS.....	3-75
081-830-2032	ASSIST WITH FINE NEEDLE ASPIRATION.....	3-77

Subject Area 4: ENT Operating Room Surgical Procedures

081-830-2016	ASSIST WITH A CHEMICAL FACIAL PEEL.....	3-79
081-830-2019	ASSIST WITH LASER RESURFACING	3-82
081-830-2020	ASSIST WITH A SURGICAL PROCEDURE IN A CLINICAL OPERATING ROOM.....	3-85
081-830-2024	ASSIST WITH NASAL POLYPECTOMY	3-89
081-830-2009	PERFORM EXAM/OPERATING ROOM CLEANING	3-91

Appendix A – Field Expedient Squad Book.....A-1**Glossary Glossary-1****Supporting References References-1**

PREFACE

This publication is for skill level 1, 2, 3, and 4 soldiers holding military occupational specialty (MOS) 91W, additional skill identifier (ASI) P2 and for trainers and first-line supervisors. It contains standardized training objectives, in the form of task summaries, to train and evaluate soldiers on critical tasks that support unit missions during wartime. Trainers and first-line supervisors should ensure soldiers holding MOS 91WP2 have access to this publication and STP 8-91W15-SM-TG, which is available for download from the Reimer Digital Library (RDL).

This manual applies to both Active and Reserve Component soldiers.

The proponent of this publication is HQ, TRADOC. Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Academy of Health Sciences, ATTN: MCCS-HTI, 1750 Greeley Rd, STE 135, Fort Sam Houston, TX 78234-5078.

CHAPTER 1

Introduction

1-1. General. This soldier training publication (STP), together with STP 8-91W15-SM-TG, identifies the individual military occupational specialty (MOS) training requirements for soldiers in MOS 91W, ASI P2. Another source of STP task data is the General Dennis J. Reimer Training and Doctrine Digital Library at the [Individual Training portal](#). Commanders, trainers, and soldiers should use the STP to plan, conduct, and evaluate individual training in units. The STP is the primary MOS reference to support the self-development and training of every soldier in the unit. It is used with the Soldier's Manual of Common Tasks, Army training and evaluation program (ARTEP) products, and FM 7-0, Training the Force, to establish effective training plans and programs that integrate soldier, leader, and collective tasks. This chapter explains how to use the STP in establishing an effective individual training program. It includes doctrinal principles and implications outlined in FM 7-0. Based on these guidelines, commanders and unit trainers must tailor the information to meet the requirements for their specific unit.

1-2. Training Requirement. Every soldier, noncommissioned officer (NCO), warrant officer, and officer has one primary mission — to be trained and ready to fight and win our nation's wars. Success in battle does not happen by accident; it is a direct result of tough, realistic, and challenging training.

a. Operational Environment.

(1) Commanders and leaders at all levels must conduct training with respect to a wide variety of operational missions across the full spectrum of operations. These operations may include combined arms, joint, multinational, and interagency considerations, and span the entire breadth of terrain and environmental possibilities. Commanders must strive to set the daily training conditions as closely as possible to those expected for actual operations.

(2) The operational missions of the Army include not only war, but also military operations other than war (MOOTW). Operations may be conducted as major combat operations, a small-scale contingency, or a peacetime military engagement. Offensive and defensive operations normally dominate military operations in war along with some small-scale contingencies. Stability operations and support operations dominate in MOOTW. Commanders at all echelons may combine different types of operations simultaneously and sequentially to accomplish missions in war and MOOTW. These missions require training since future conflict will likely involve a mix of combat and MOOTW, often concurrently. The range of possible missions complicates training. Army forces cannot train for every possible mission; they train for war and prepare for specific missions as time and circumstances permit.

(3) One type of MOOTW is the Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) event. To assist commanders and leaders in training their units, CBRNE-related information is being included in AMEDD mission training plans (MTPs). Even though most collective tasks within an MTP may support a CBRNE event, the ones that will most directly be impacted are clearly indicated with a statement in the CONDITION that reads: "THIS TASK MAY BE USED TO SUPPORT A CBRNE EVENT." These collective tasks and any supporting individual tasks in this soldier's manual should be considered for training emphasis.

(4) Our forces today use a train-alert-deploy sequence. We cannot count on the time or opportunity to correct or make up training deficiencies after deployment. Maintaining forces that are ready now, places increased emphasis on training and the priority of training. This concept is a key link between operational and training doctrine.

(5) Units train to be ready for war based on the requirements of a precise and specific mission. In the process they develop a foundation of combat skills that can be refined based on the requirements of the assigned mission. Upon alert, commanders assess and refine from this foundation of skills. In the train-alert-deploy process, commanders use whatever time the alert cycle provides to continue refinement of mission-focused training. Training continues during time available between alert notification and deployment, between deployment and employment, and even during employment as units adapt to the specific battlefield environment and assimilate combat replacements.

b. How the Army Trains the Army.

(1) Training is a team effort and the entire Army — Department of the Army, major commands (MACOMs), the institutional training base, units, the combat training centers (CTCs), each individual soldier, and the civilian workforce — has a role that contributes to force readiness. Department of the Army and MACOMs are responsible for resourcing the Army to train. The Institutional Army, including schools, training centers, and NCO academies, for example, train soldiers and leaders to take their place in units in the Army by teaching the doctrine and tactics, techniques, and procedures (TTP). Units, leaders, and individuals train to standard on their assigned critical individual tasks. The unit trains first as an organic unit and then as an integrated component of a team. Before the unit can be trained to function as a team, each soldier must be trained to perform their individual supporting tasks to standard. Operational deployments and major training opportunities, such as major training exercises, CTCs, and ARTEP evaluations provide rigorous, realistic, and stressful training and operational experience under actual or simulated combat and operational conditions to enhance unit readiness and produce bold, innovative leaders. The result of this Army-wide team effort is a training and leader development system that is unrivaled in the world. Effective training produces the force — soldiers, leaders, and units — that can successfully execute any assigned mission.

(2) The Army Training and Leader Development Model (Figure 1-1) centers on developing trained and ready units led by competent and confident leaders. The model depicts an important dynamic that creates a lifelong learning process. The three core domains that shape the critical learning experiences throughout a soldier's and leader's time span are the operational, institutional, and self-development domains. Together, these domains interact using feedback and assessment from various sources and methods to maximize warfighting readiness. Each domain has specific, measurable actions that must occur to develop our leaders.

- The operational domain includes home station training, CTC rotations, and joint training exercises and deployments that satisfy national objectives. Each of these actions provides foundational experiences for soldier, leader, and unit development.

- The institutional domain focuses on educating and training soldiers and leaders on the key knowledge, skills, and attributes required to operate in any environment. It includes individual, unit and joint schools, and advanced education.
- The self-development domain, both structured and informal, focuses on taking those actions necessary to reduce or eliminate the gap between operational and institutional experiences.

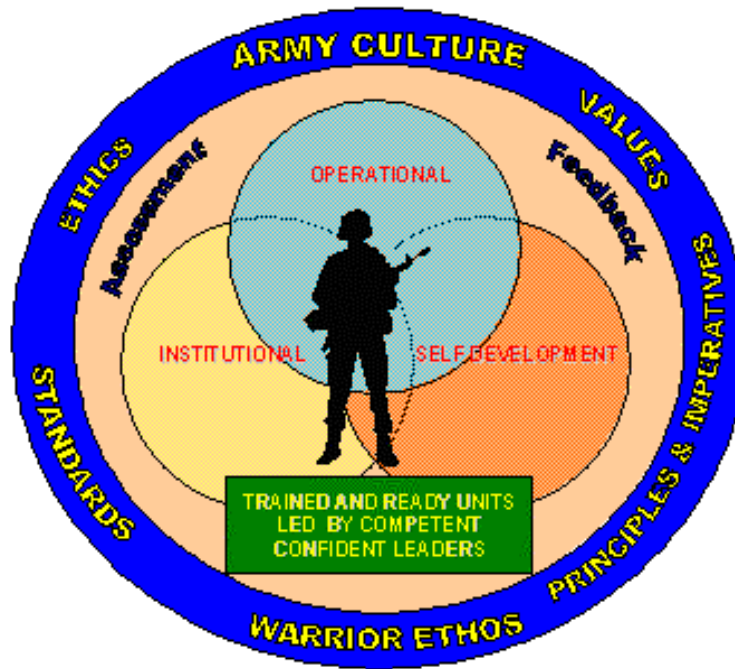


Figure 1-1. Army Training and Leader Development Model

(3) Throughout this lifelong learning and experience process, there is formal and informal assessment and feedback of performance to prepare leaders and soldiers for their next level of responsibility. Assessment is the method used to determine the proficiency and potential of leaders against a known standard. Feedback must be clear, formative guidance directly related to the outcome of training events measured against standards.

c. Leader Training and Leader Development.

(1) Competent and confident leaders are a prerequisite to the successful training of units. It is important to understand that leader training and leader development are integral parts of unit readiness. Leaders are inherently soldiers first and should be technically and tactically proficient in basic soldier skills. They are also adaptive, capable of sensing their environment, adjusting the plan when appropriate, and properly applying the proficiency acquired through training.

(2) Leader training is an expansion of these skills that qualifies them to lead other soldiers. As such, doctrine and principles of training require the same level of attention of senior

commanders. Leader training occurs in the Institutional Army, the unit, the CTCs, and through self-development. Leader training is just one portion of leader development.

(3) Leader development is the deliberate, continuous, sequential, and progressive process, grounded in Army values, that grows soldiers and civilians into competent and confident leaders capable of decisive action. Leader development is achieved through the life-long synthesis of the knowledge, skills, and experiences gained through institutional training and education, organizational training, operational experience, and self-development. Commanders play the key roll in leader development that ideally produces tactically and technically competent, confident, and adaptive leaders who act with boldness and initiative in dynamic, complex situations to execute mission-type orders achieving the commander's intent.

(4) A life cycle management diagram for MOS 91WP2 soldiers is on page 1-5. You can find more information and check for updates at <http://das.cs.amedd.army.mil/ooc.htm> (scroll down to LIFE CYCLE MANAGEMENT, select ENLISTED, and find the appropriate tab along the bottom). This information, combined with the MOS Training Plan in Chapter 2, forms the career development model for the MOS.

d. Training Responsibility. Soldier and leader training and development continue in the unit. Using the institutional foundation, training in organizations and units focuses and hones individual and team skills and knowledge.

(1) Commander Responsibility.

(a) The unit commander is responsible for the wartime readiness of all elements in the formation. The commander is, therefore, the primary trainer of the organization and is responsible for ensuring that all training is conducted in accordance with the STP to the Army standard.

(b) Commanders ensure STP standards are met during all training. If a soldier fails to meet established standards for identified MOS tasks, the soldier must retrain until the tasks are performed to standard. Training to standard on MOS tasks is more important than completion of a unit training event such as an ARTEP evaluation. The objective is to focus on sustaining MOS proficiency — this is the critical factor commanders must adhere to when training individual soldiers in units.

(2) NCO Responsibility.

(a) A great strength of the US Army is its professional NCO Corps who takes pride in being responsible for the individual training of soldiers, crews, and small teams. The NCO support channel parallels and complements the chain of command. It is a channel of communication and supervision from the Command Sergeant Major (CSM) to the First Sergeants (1SGs) and then to other NCOs and enlisted personnel. NCOs train soldiers to the non-negotiable standards published in STPs. Commanders delegate authority to NCOs in the support channel as the primary trainers of individual, crew, and small team training. Commanders hold NCOs responsible for conducting standards-based, performance-oriented, battle-focused training and providing feedback on individual, crew, and team proficiency. Commanders define responsibilities and authority of their NCOs to their staffs and subordinates.

MOS 91W ASI P2 EAR, NOSE, & THROAT SPECIALTY CAREER/TRAINING LIFE CYCLE										
RANK	AMEDD Course NR	TRAINING	LENGTH	LOCATION	ATTENDANCE REQUIREMENT	Self-Development Course NR	SELF-DEVELOPMENT	LENGTH	LOCATION	ATTENDANCE REQUIREMENT
E1 - E5		Basic Combat Training Course	9 wks	Ft. LW Ft. Sill Ft. Jackson Ft. Benning	IET		Army Correspondence Course Program			
*	300-91W10	Health Care Specialist	16 wks	FSH, TX	AIT/MOS	081-CBRNE-W	<i>Introduction to CBRNE</i>		On-Line	Just in Time
	300-P2	Ear, Nose, and Throat Specialty Course	PH1 6 wks PH2 7 wks	FSH, TX Multiple Sites	ASI		See 91W Correspondence Courses			
		PLDC	4 wks	Multiple sites	Leadership	300-A0708	Surgical Support NCO Course	4 days	SA, TX	Sustainment
	6-8-C40(91WY2)	AMEDD NCO BASIC (NCOES)	14 Wks, 4 Days	FSH, TX	Leadership	340-A0715	MEDCOM CSM/SGM SR NCO	4 Days	SA, TX	Optional
		BASELINE	REQUIRED	RECOMMENDED	PROFIS	340-A0743	CSM/SGM SR NCO Course	4 days	Landstuhl, Germany	Leadership
		Basic Trauma Life Support (BTLS)	X		X/TOE	081-MD0010	Basic Medical Terminology		Correspondence	Sustainment
		Cardio Pulmonary Resuscitation (CPR)	X			081-ENHANC	Combat Life Saver (CLS)		Unit Training	Just in Time
		Field Management of Chemical & Biological Casualties (FMCBC)	X		X/TOE		PPSCP			
		Emergency Medical Training (EMT)-I	X				Specialty Courses			
E6 - E9		Instructor Courses				5K-F13/520-F10	<i>CBRNE TRAINER EVALUATOR</i>	2 Days	Fort Sam Houston, TX	Just in Time
	5K-F3/520-F3	Instructor Training Course	2 weeks	AHS	JIT/SI (5K)	5K-F7/520-F7	ADVANCED INSTRUCTOR TRAINING COURSE (Ph 1&2)	1 Wk, 3 Days	FSH, TX	
	5K-F6/520-F6	Small Group Instructor Training Course (SGITC)	1 Week	AHS	JIT	5K-F8/520-F8	EDUCATION AND TRAINING FOR THE 21ST CENTURY	4 wks	FSH, TX	
	250-ASI2S	Battle Staff NCO	4 Wks, 1 Day	USASMA (Ft. Bliss)	Optional					
		Master Fitness Trainer	2 wks	Multiple Sites	Just in time ASI P5					
		Drill Sgt School	9 wks	Multiple Sites	Just in Time SQI-X					
	6-8-C42	AMEDD NCO Advanced (NCOES)	2 Wks, 3 Days	FSH, TX	Leadership					
	1-250-C5	U.S. ARMY SERGEANTS MAJOR	38 Wks, 2 Days	USASMA (Ft. Bliss)	Just in time MEL-A					
	521-F1	Command Sergeant Major Course	1 wk	USASMA	Leadership					
	521-SQIM	First Sergeant Course	8 wks	USASMA	Just in time SQI-M					
		Recruiter	6 wks	USAREC	Just in time					
* NOTE: Use with 91W SPC thru SFC. NOTE: Expert Field Medical Badge and DEPMEDS if assigned PROFIS										

(b) NCOs continue the soldierization process of newly assigned enlisted soldiers, and begin their professional development. NCOs are responsible for conducting standards-based, performance-oriented, battle-focused training. They identify specific individual, crew, and small team tasks that support the unit's collective mission essential tasks; plan, prepare, rehearse, and execute training; and evaluate training and conduct after action reviews (AARs) to provide feedback to the commander on individual, crew, and small team proficiency. Senior NCOs coach junior NCOs to master a wide range of individual tasks.

(3) Soldier Responsibility. Each soldier is responsible for performing individual tasks identified by the first-line supervisor based on the unit's mission essential task list (METL). Soldiers must perform tasks to the standards included in the task summary. If soldiers have questions about tasks or which tasks in this manual they must perform, they are responsible for asking their first-line supervisor for clarification, assistance, and guidance. First-line supervisors know how to perform each task or can direct soldiers to appropriate training materials, including current field manuals, technical manuals, and Army regulations. Soldiers are responsible for using these materials to maintain performance. They are also responsible for maintaining standard performance levels of all Soldier's Manual of Common Tasks at their current skill level and below. Periodically, soldiers should ask their supervisor or another soldier to check their performance to ensure that they can perform the tasks.

1-3. Battle-Focused Training. Battle focus is a concept used to derive peacetime training requirements from assigned and anticipated missions. The priority of training in units is to train to standard on the wartime mission. Battle focus guides the planning, preparation, execution, and assessment of each organization's training program to ensure its members train as they are going to fight. Battle focus is critical throughout the entire training process and is used by commanders to allocate resources for training based on wartime and operational mission requirements. Battle focus enables commanders and staffs at all echelons to structure a training program that copes with non-mission-related requirements while focusing on mission essential training activities. It is recognized that a unit cannot attain proficiency to standard on every task whether due to time or other resource constraints. However, unit commanders can achieve a successful training program by consciously focusing on a reduced number of METL tasks that are essential to mission accomplishment.

a. **Linkage Between METL and STP.** A critical aspect of the battle focus concept is to understand the responsibility for and the linkage between the collective mission essential tasks and the individual tasks that support them. For example, the commander and the CSM/1SG must jointly coordinate the collective mission essential tasks and supporting individual tasks on which the unit will concentrate its efforts during a given period. This task hierarchy is provided in the task database at the Reimer Digital Library. The CSM/1SG must select the specific individual tasks that support each collective task to be trained. Although NCOs have the primary role in training and sustaining individual soldier skills, officers at every echelon remain responsible for training to established standards during both individual and collective training. Battle focus is applied to all missions across the full spectrum of operations.

b. **Relationship of STPs to Battle-focused Training.** The two key components of any STP are the soldier's manual (SM) and trainer's guide (TG). Each gives leaders important information to help implement the battle-focused training process. The trainer's guide relates soldier and leader tasks in the MOS and skill level to duty positions and equipment. It states where the task is trained, how often training should occur to sustain proficiency, and who in the unit should be trained. As leaders assess and plan training, they should rely on the trainer's guide to help identify training needs.

(1) Leaders conduct and evaluate training based on Army-wide training objectives and on the task standards published in the soldier's manual task summaries or in the Reimer Digital Library. The task summaries ensure that --

- Trainers in every unit and location define task standards the same way
- Trainers evaluate all soldiers to the same standards

(2) Figure 1-2 shows how battle-focused training relates to the trainer's guide and soldier's manual:

- The left column shows the steps involved in training soldiers.
- The right column shows how the STP supports each of these steps.

BATTLE-FOCUS PROCESS	STP SUPPORT PROCESS
Select supporting soldier tasks	Use TG to relate tasks to METL
Conduct training assessment	Use TG to define what soldier tasks to assess
Determine training objectives	Use TG to set objectives
Determine strategy; plan for training	Use TG to relate soldier tasks to strategy
Conduct pre-execution checks	Use SM task summary as source for task performance
Execute training; conduct after action review	Use SM task summary as source for task performance
Evaluate training against established standards	Use SM task summary as standard for evaluation

Figure 1-2. Relationship of Battle-focused Training and STP

1-4. Task Summary Format. Task summaries outline the wartime performance requirements of each critical task in the SM. They provide the soldier and the trainer with the information necessary to prepare, conduct, and evaluate critical task training. As a minimum, task summaries include information the soldier must know and the skills that he must perform to standards for each task. The format of the task summaries included in this SM is as follows:

- Task Title.** The task title identifies the action to be performed.
- Task Number.** A 10-digit number identifies each task or skill. This task number, along with the task title, must be included in any correspondence pertaining to the task.
- Conditions.** The task conditions identify all the equipment, tools, references, job aids, and supporting personnel that the soldier needs to use to perform the task in wartime. This section identifies any environmental conditions that can alter task performance, such as visibility, temperature, or wind. This section also identifies any specific cues or events that trigger task performance, such as a chemical attack or identification of a threat vehicle.
- Standards.** The task standards describe how well and to what level the task must be performed under wartime conditions. Standards are typically described in terms of accuracy, completeness, and speed.
- Performance Steps.** This section includes a detailed outline of information on how to perform the task. Additionally, some task summaries include safety statements and notes.

Safety statements (danger, warning, and caution) alert users to the possibility of immediate death, personal injury, or damage to equipment. Notes provide a small, extra supportive explanation or hint relative to the performance steps.

f. Evaluation Preparation (when used). This subsection indicates necessary modifications to task performance in order to train and evaluate a task that cannot be trained to the wartime standard under wartime conditions. It may also include special training and evaluation preparation instructions to accommodate these modifications and any instructions that should be given to the soldier before evaluation.

g. Performance Measures. This evaluation guide identifies the specific actions that the soldier must do to successfully complete the task. These actions are listed in a GO/NO-GO format for easy evaluation. Each evaluation guide contains an evaluation guidance statement that indicates the requirements for receiving a GO on the evaluation.

h. References. This section identifies references that provide more detailed and thorough explanations of task performance requirements than those given in the task summary description.

1-5. Training Execution. All good training, regardless of the specific collective, leader, and individual tasks being executed, must comply with certain common requirements. These include adequate preparation, effective presentation and practice, and thorough evaluation. The execution of training includes preparation for training, conduct of training, and recovery from training.

a. Preparation for Training. Formal near-term planning for training culminates with the publication of the unit training schedule. Informal planning, detailed coordination, and preparation for executing the training continue until the training is performed. Commanders and other trainers use training meetings to assign responsibility for preparation of all scheduled training. Preparation for training includes selecting tasks to be trained, planning the conduct of the training, training the trainers, reconnaissance of the site, issuing the training execution plan, and conducting rehearsals and pre-execution checks. Pre-execution checks are preliminary actions commanders and trainers use to identify responsibility for these and other training support tasks. They are used to monitor preparation activities and to follow up to ensure planned training is conducted to standard. Pre-execution checks are a critical portion of any training meeting. During preparation for training, battalion and company commanders identify and eliminate potential training distracters that develop within their own organizations. They also stress personnel accountability to ensure maximum attendance at training.

(1) Subordinate leaders, as a result of the bottom-up feed from internal training meetings, identify and select the individual tasks necessary to support the identified training objectives. Commanders develop the tentative plan to include requirements for preparatory training, concurrent training, and training resources. At a minimum, the training plan should include confirmation of training areas and locations, training ammunition allocations, training simulations and simulators availability, transportation requirements, soldier support items, a risk management analysis, assignment of responsibility for the training, designation of trainers responsible for approved training, and final coordination. The time and other necessary resources for retraining must also be an integral part of the original training plan.

(2) Leaders, trainers, and evaluators are identified, trained to standard, and rehearsed prior to the conduct of the training. Leaders and trainers are coached on how to

train, given time to prepare, and rehearsed so that training will be challenging and doctrinally correct. Commanders ensure that trainers and evaluators are not only tactically and technically competent on their training tasks, but also understand how the training relates to the organization's METL. Properly prepared trainers, evaluators, and leaders project confidence and enthusiasm to those being trained. Trainer and leader training is a critical event in the preparation phase of training. These individuals must demonstrate proficiency on the selected tasks prior to the conduct of training.

(3) Commanders, with their subordinate leaders and trainers, conduct site reconnaissance, identify additional training support requirements, and refine and issue the training execution plan. The training plan should identify all those elements necessary to ensure the conduct of training to standard. Rehearsals are essential to the execution of good training. Realistic, standards-based, performance-oriented training requires rehearsals for trainers, support personnel, and evaluators. Preparing for training in Reserve Component (RC) organizations can require complex pre-execution checks. RC trainers must often conduct detailed coordination to obtain equipment, training support system products, and ammunition from distant locations. In addition, RC pre-execution checks may be required to coordinate Active Component assistance from the numbered CONUSA, training support divisions, and directed training affiliations.

b. Conduct of Training. Ideally, training is executed using the crawl-walk-run approach. This allows and promotes an objective, standards-based approach to training. Training starts at the basic level. Crawl events are relatively simple to conduct and require minimum support from the unit. After the crawl stage, training becomes incrementally more difficult, requiring more resources from the unit and home station, and increasing the level of realism. At the run stage, the level of difficulty for the training event intensifies. Run stage training requires optimum resources and ideally approaches the level of realism expected in combat. Progression from the walk to the run stage for a particular task may occur during a one-day training exercise or may require a succession of training periods over time. Achievement of the Army standard determines progression between stages.

(1) In crawl-walk-run training, the tasks and the standards remain the same; however, the conditions under which they are trained change. Commanders may change the conditions, for example, by increasing the difficulty of the conditions under which the task is being performed, increasing the tempo of the task training, increasing the number of tasks being trained, or by increasing the number of personnel involved in the training. Whichever approach is used, it is important that all leaders and soldiers involved understand in which stage they are currently training and understand the Army standard.

(2) An AAR is immediately conducted and may result in the need for additional training. Any task that was not conducted to standard should be retrained. Retraining should be conducted at the earliest opportunity. Commanders should program time and other resources for retraining as an integral part of their training plan. Training is incomplete until the task is trained to standard. Soldiers will remember the standard enforced, not the one discussed.

c. Recovery From Training. The recovery process is an extension of training, and once completed, it signifies the end of the training event. At a minimum, recovery includes conduct of maintenance training, turn-in of training support items, and the conduct of AARs that review the overall effectiveness of the training just completed.

(1) Maintenance training is the conduct of post-operations preventive maintenance checks and services, accountability of organizational and individual equipment, and final inspections. Class IV, Class V, TADSS, and other support items are maintained, accounted for, and turned-in, and training sites and facilities are closed out.

(2) AARs conducted during recovery focus on collective, leader, and individual task performance, and on the planning, preparation, and conduct of the training just completed. Unit AARs focus on individual and collective task performance, and identify shortcomings and the training required to correct deficiencies. AARs with leaders focus on tactical judgment. These AARs contribute to leader learning and provide opportunities for leader development. AARs with trainers and evaluators provide additional opportunities for leader development.

1-6. Training Assessment. Assessment is the commander's responsibility. It is the commander's judgment of the organization's ability to accomplish its wartime operational mission. Assessment is a continuous process that includes evaluating individual training, conducting an organizational assessment, and preparing a training assessment. The commander uses his experience, feedback from training evaluations, and other evaluations and reports to arrive at his assessment. Assessment is both the end and the beginning of the training management process. Training assessment is more than just training evaluation, and encompasses a wide variety of inputs. Assessments include such diverse systems as training, force integration, logistics, and personnel, and provide the link between the unit's performance and the Army standard. Evaluation of training is, however, a major component of assessment. Training evaluations provide the commander with feedback on the demonstrated training proficiency of soldiers, leaders, battle staffs, and units. Commanders cannot personally observe all training in their organization and, therefore, gather feedback from their senior staff officers and NCOs.

a. Evaluation of Training. Training evaluations are a critical component of any training assessment. Evaluation measures the demonstrated ability of soldiers, commanders, leaders, battle staffs, and units against the Army standard. Evaluation of training is integral to standards-based training and is the cornerstone of leader training and leader development. STPs describe standards that must be met for each soldier task.

(1) All training must be evaluated to measure performance levels against the established Army standard. The evaluation can be as fundamental as an informal, internal evaluation performed by the leader conducting the training. Evaluation is conducted specifically to enable the individual undergoing the training to know whether the training standard has been achieved. Commanders must establish a climate that encourages candid and accurate feedback for the purpose of developing leaders and trained soldiers.

(2) Evaluation of training is not a test; it is not used to find reasons to punish leaders and soldiers. Evaluation tells soldiers whether or not they achieved the Army standard and, therefore, assists them in determining the overall effectiveness of their training plans. Evaluation produces disciplined soldiers, leaders, and units. Training without evaluation is a waste of time and resources.

(3) Evaluations are used by leaders as an opportunity to coach and mentor soldiers. A key element in developing leaders is immediate, positive feedback that coaches and leads subordinate leaders to achieve the Army standard. This is a tested and proven path to develop competent, confident adaptive leaders.

b. Evaluators. Commanders must plan for formal evaluation and must ensure the evaluators are trained. These evaluators must also be trained as facilitators to conduct AARs that elicit maximum participation from those being trained. External evaluators will be certified in the tasks they are evaluating and normally will not be dual-hatted as a participant in the training being executed.

c. Role of Commanders and Leaders. Commanders ensure that evaluations take place at each echelon in the organization. Commanders use this feedback to teach, coach, and mentor their subordinates. They ensure that every training event is evaluated as part of training execution and that every trainer conducts evaluations. Commanders use evaluations to focus command attention by requiring evaluation of specific mission essential and battle tasks. They also take advantage of evaluation information to develop appropriate lessons learned for distribution throughout their commands.

d. After Action Review. The AAR, whether formal or informal, provides feedback for all training. It is a structured review process that allows participating soldiers, leaders, and units to discover for themselves what happened during the training, why it happened, and how it can be done better. The AAR is a professional discussion that requires the active participation of those being trained. FM 7-1 provides detailed instructions for conducting an AAR and detailed guidance on coaching and critiquing during training.

1-7. Training Support. This manual includes the following information which provides additional training support information.

a. Appendix A, DA Form 5165-R (Field Expedient Squad Book). This appendix provides an overprinted copy of DA Form 5165-R for the tasks in this MOS. The NCO trainer can use this form to set up the leader book described in FM 7-1, paragraph 4-12.

b. Glossary. The glossary, which follows the last appendix, is a single comprehensive list of acronyms, abbreviations, definitions, and letter symbols.

c. References. This section contains two lists of references, required and related, which support training of all tasks in this SM. Required references are listed in the conditions statement and are required for the soldier to do the task. Related references are materials that provide more detailed information and a more thorough explanation of task performance.

CHAPTER 2

Training Guide

2-1. General. The MOS Training Plan (MTP) identifies the essential components of a unit training plan for individual training. Units have different training needs and requirements based on differences in environment, location, equipment, dispersion, and similar factors. Therefore, the MTP should be used as a guide for conducting unit training and not a rigid standard. The MTP consists of two parts. Each part is designed to assist the commander in preparing a unit training plan which satisfies integration, cross training, training up, and sustainment training requirements for soldiers in this MOS.

Part One of the MTP shows the relationship of an MOS skill level between duty position and critical tasks. These critical tasks are grouped by task commonality into subject areas.

Section I lists subject area numbers and titles used throughout the MTP. These subject areas are used to define the training requirements for each duty position within an MOS.

Section II identifies the total training requirement for each duty position within an MOS and provides a recommendation for cross training and train-up/merger training.

- **Duty Position Column.** This column lists the duty positions of the MOS, by skill level, which have different training requirements.
- **Subject Area Column.** This column lists, by numerical key (see Section I), the subject areas a soldier must be proficient in to perform in that duty position.
- **Cross Train Column.** This column lists the recommended duty position for which soldiers should be cross trained.
- **Train-up/Merger Column.** This column lists the corresponding duty position for the next higher skill level or MOSC the soldier will merge into on promotion.

Part Two lists, by general subject areas, the critical tasks to be trained in an MOS and the type of training required (resident, integration, or sustainment).

- **Subject Area Column.** This column lists the subject area number and title in the same order as Section I, Part One of the MTP.
- **Task Number Column.** This column lists the task numbers for all tasks included in the subject area.
- **Title Column.** This column lists the task title for each task in the subject area.
- **Training Location Column.** This column identifies the training location where the task is first trained to soldier training publications standards. If the task is first trained to standard in the unit, the word "Unit" will be in this column. If the task is first trained to standard in the training base, it will identify, by brevity code (ANCOC, BNCOC, etc.), the resident course where the task was taught. Figure 2-1 contains a list of training locations and their corresponding brevity codes.

AIT	Advanced Individual Training
------------	------------------------------

Figure 2-1. Training Locations

- **Sustainment Training Frequency Column.** This column indicates the recommended frequency at which the tasks should be trained to ensure soldiers maintain task proficiency. Figure 2-2 identifies the frequency codes used in this column.

BA	- Biannually
AN	- Annually
SA	- Semiannually
QT	- Quarterly
MO	- Monthly
BW	- Biweekly
WK	- Weekly

Figure 2-2. Sustainment Training Frequency Codes

- **Sustainment Training Skill Level Column.** This column lists the skill levels of the MOS for which soldiers must receive sustainment training to ensure they maintain proficiency to soldier's manual standards.

2-2. Part One, Section I. Subject Area Codes.

Skill Level 1

- 1 Audiology
- 2 ENT Clinic
- 3 ENT Clinic Surgical Procedures
- 4 ENT Operating Room Surgical Procedures

2-3. Part One, Section II. Duty Position Training Requirements.

NOTE: Refer to STP 8-91W15-SM-TG for additional sustainment training requirements.

DUTY POSITION		SUBJECT AREAS	CROSS TRAIN	TRAIN-UP/MERGER
SL 1-4	ENT Specialist	1-4	NA	91W5 Health Care NCO

2-4. Part Two. Critical Tasks List.**MOS TRAINING PLAN
91WP2****CRITICAL TASKS**

Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
Skill Level 1				
Subject Area 1. Audiology				
081-830-2000	VALIDATE FUNCTIONING OF THE MANUAL AUDIOMETER	AIT	AN	1-4
081-830-2004	VALIDATE FUNCTIONING OF THE DOEHR5-HC SYSTEM	AIT	AN	1-4
081-830-2001	COMPLETE PURE-TONE AND SPEECH DIAGNOSTIC AUDIOMETRY	AIT	AN	1-4
081-830-2002	CONDUCT ACOUSTIC IMMITTANCE MEASUREMENTS	AIT	AN	1-4
081-830-2008	PERFORM OTOACOUSTIC EMISSION (OAE) SCREENING	AIT	AN	1-4
081-830-2005	CONDUCT MONITORING AUDIOMETRY	AIT	AN	1-4
081-830-2003	FIT PREFORMED EARPLUGS	AIT	AN	1-4
081-830-2006	PRODUCE A HEARING AID EARMOLD IMPRESSION	AIT	AN	1-4
081-830-2007	REPAIR MINOR HEARING AID DEFICIENCIES	AIT	AN	1-4
Subject Area 2. ENT Clinic				
081-830-2012	PERFORM ANTERIOR PACKING	AIT	AN	1-4
081-830-2015	PERFORM CERUMENECTOMY	AIT	AN	1-4
081-830-2017	PERFORM EAR IRRIGATION IN AN ENT CLINIC	AIT	AN	1-4
081-830-2018	PERFORM KOBRAK CALORIC TEST	AIT	AN	1-4
081-830-2021	APPLY MASTOID DRESSING	AIT	AN	1-4
081-830-2030	PERFORM FOREIGN BODY REMOVAL FROM EAR	AIT	AN	1-4
081-830-2034	REMOVE NASAL FOREIGN BODY	AIT	AN	1-4
081-830-2026	PERFORM SUTURES/STAPLES REMOVAL	AIT	AN	1-4
081-830-2027	REMOVE NASAL SPLINTS	AIT	AN	1-4
081-830-2028	PERFORM TRACHEOSTOMY MAINTENANCE	AIT	AN	1-4
081-830-2033	PERFORM ENDOSCOPE MAINTENANCE	AIT	AN	1-4
Subject Area 3. ENT Clinic Surgical Procedures				
081-830-2022	ASSIST WITH A SURGICAL PROCEDURE IN A CLINIC EXAM ROOM	AIT	AN	1-4
081-830-2011	ASSIST WITH CLOSED NASAL FRACTURE REDUCTION	AIT	AN	1-4
081-830-2023	ASSIST WITH MYRINGOTOMY	AIT	AN	1-4
081-830-2031	ASSIST WITH PERITONSILLAR ABSCESS	AIT	AN	1-4
081-830-2032	ASSIST WITH FINE NEEDLE ASPIRATION	AIT	AN	1-4

CRITICAL TASKS

Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
<i>Subject Area 4. ENT Operating Room Surgical Procedures</i>				
081-830-2016	ASSIST WITH A CHEMICAL FACIAL PEEL	AIT	AN	1-4
081-830-2019	ASSIST WITH LASER RESURFACING	AIT	AN	1-4
081-830-2020	ASSIST WITH A SURGICAL PROCEDURE IN A CLINICAL OPERATING ROOM	AIT	AN	1-4
081-830-2024	ASSIST WITH NASAL POLYPECTOMY	AIT	AN	1-4
081-830-2009	PERFORM EXAM/OPERATING ROOM CLEANING	AIT	AN	1-4

CHAPTER 3

MOS/Skill Level Tasks

Skill Level 1

Subject Area 1: Audiology

VALIDATE FUNCTIONING OF THE MANUAL AUDIOMETER

081-830-2000

Conditions: You must perform daily checks on a manual clinical audiometer if you are going to use the audiometer that day. You will need an audiometric test booth, two patch cords with phone plugs at each end, DD Form 2217, optional electroacoustic ear, replacement earphone cushions and cords, and a cleaning solution per local SOP for earphone cushions. You have a copy of the task performance steps available for reference.

Standards: Verified valid electroacoustic calibration date. Performed listening checks to determine no intermittence or noise present in the circuit, and no obvious problems in frequency output or intensity control. Established baseline thresholds for a listener on DD Form 2217 for biological calibration or confirmed daily biological calibration thresholds to be within ± 5 dB of baseline thresholds (± 10 dB at 6000 Hz).

Performance Steps

1. Check status of electroacoustic calibration of the audiometer.
 - a. Locate DD Form 2163 label on the audiometer.
 - b. Is the date of the last electroacoustic calibration recorded on DD Form 2163 within the past one year?
 - (1) If YES, continue to step 2.
 - (2) If NO, take the audiometer out of service immediately and request electroacoustic calibration.
2. Complete a visual inspection of the earphones and cords.
 - a. Clean earphone cushions, headband, and bone oscillator IAW local SOP. Be sure no liquid gets into the center of the earphone where the diaphragm is located.
 - b. Adjust headband tension by bending the headband so earphones are touching or almost touching each other.
 - c. Replace any earphone cushions that are hard or cracked.
 - d. Replace earphone cords that are cracked or broken (replacing cords does not invalidate calibration).
3. Prepare to do the daily listening check of the audiometer IAW "Exercises in Audiometry," Exercise 1, page 2, no. 3.
 - a. Unplug the earphones from the jack panel in the patient room.
 - b. Using two short cords with phono plugs at each end, plug one cord into the jack replacing the right earphone, and plug the other cord into the jack replacing the left earphone. Plug the other end of each cord into empty jacks on the panel which lead to jacks in the control room; plug the two earphones into the corresponding jacks in the control room.

Performance Steps

NOTE: If you do not have two empty jacks in the patient room to plug the short cords into, unplug the patient response switch or the bone oscillator and use those jacks.

- c. Place the earphones over your ears and prepare to operate the audiometer for the listening check.

4. Perform the daily listening check IAW "Exercises in Audiometry," Exercise 1, page 3.

- a. Turn the audiometer on.
- b. Set the output to a continuous (nonpulsed) tone. When checking earphones begin with the right earphone.
- c. Turn the interrupter switch to the "normally on" position at a comfortable listening level (about 40 dB HL). Listen to each tone as you switch through the entire frequency range. Each tone should sound "pure," that is, free of obvious harmonics or other distortion. There should be no audible clicks in the earphone during the frequency sweep.
- d. With a 1000 Hz tone continuously "on," wiggle the cord near the transducer and near the plug and listen for any sound intermittence or noise.
- e. Press the interrupter switch several times to check for clicks or other unwanted noises.
- f. With an audible 1000 Hz tone still in the "on" position, move the attenuator throughout the entire intensity range. The loudness should increase linearly, and there should be no extraneous sounds in the earphone.
- g. Switch to the left earphone. The loudness should be about the same as in the right earphone at each intensity setting, and there should be no noise apparent during switching. Repeat steps 4c and 4d; then continue to step 4h.
- h. Repeat steps 4b and 4d for all transducers (insert earphones, forehead bone oscillator, mastoid bone oscillator) in use with the audiometer. Use the patch cords to "round robin" these transducers from the patient room to the control room as you did with the earphones in step 3b.
- i. If the audiometer has two channels, switch to the other channel and repeat steps 4b through 4h.
- j. If any abnormalities are detected, take the audiometer out of clinical service until it can be repaired.
- k. Plug the earphones and the bone oscillator back into the original jacks in the patient room ensuring that the routing to the output terminals of the audiometer is correct.

5. Complete the daily biological audiometer calibration check.

NOTE: Doing a biological audiometer calibration check on an audiometer each day that it is to be used is a monotonous procedure. To avoid burn-out for a LISTENER, it is recommended that the OPERATOR establish baseline audiograms on DD Forms 2217 for several LISTENERS, rotating the daily calibration check to a different LISTENER each day. Another option is to use an electronic electroacoustic ear rather than a human LISTENER.

- a. If you are using an electroacoustic ear as your LISTENER, unplug the patient response switch from the jack panel in the patient room. Connect the output from the electroacoustic ear to the response switch jack. Place the right and left earphones on the right and left "ears" of the electroacoustic ear. If you are not using an electroacoustic ear, recruit a human LISTENER who is routinely available on a daily basis.
- b. Does your LISTENER have a baseline audiogram already recorded on DD Form 2217, and is the date of the baseline audiogram after the most recent electroacoustic calibration date of the audiometer?
 - (1) If YES, go to step 5c.

Performance Steps

- (2) If NO, complete pure tone baseline audiometry for that LISTENER and record the thresholds in the baseline area of a new DD Form 2217. Go to step 5d.
- c. Complete pure tone audiometry on the LISTENER. Record the date, name of examiner, and pure tone thresholds on the DD Form 2217 for that LISTENER. Are all the pure tone thresholds within ± 5 dB of the baseline thresholds (± 10 dB at 6000 Hz) recorded on the DD Form 2217?
 - (1) If YES, notate on the DD Form 2217 that the audiometer PASSED and put the audiometer into service for the day. Go to step 5d.
 - (2) If NO, notate on the DD Form 2217 that the audiometer FAILED, and try to account for the discrepancy and correct it if possible. Repeat the audiogram and record the repeat test on a new line in the DD Form 2217 and make a notation of your actions in the REMARKS section. Are the thresholds now within ± 5 dB of the baseline thresholds (± 10 dB at 6000 Hz)?
 - (a) If YES, notate on the DD Form 2217 that the audiometer PASSED and put the audiometer into service for the day.
 - (b) If NO, notate on the DD Form 2217 that the audiometer FAILED and, also, make a notation in the REMARKS section of the DD Form 2217 of the problem and the corrective action taken. Take the audiometer out of service and request repair.
- d. Place the DD Form 2217 into a clinic file IAW local SOP.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. If the electroacoustic calibration recorded on DD Form 2163 was more than a year old, took audiometer out of service and requested electroacoustic calibration.	—	—
2. Replaced earphone cushions and cords that were hard, cracked, or broken.	—	—
3. Removed audiometer from service if any abnormalities were present during the daily listening check.	—	—
4. Correctly completed DD Form 2217 for daily biological audiometer calibration. Attempted to account for and corrected any problem if audiometer failed.	—	—

Evaluation Guidance: The soldier may have a copy of the performance steps available as a reference during performance of all steps of this task. Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References**Required**

EXERCISES IN AUDIOMETRY

Related

INTRODUCTION TO AUDIOLOGY

VALIDATE FUNCTIONING OF THE DOEHRS-HC SYSTEM

081-830-2004

Conditions: You must validate the Defense Occupational and Environmental Health Readiness System - Hearing Conservation (DOEHRS-HC). You will need locally approved disinfectant, network password, DOEHRS username and passwords, a daily function checklist, and local SOP.

Standards: Confirmed functional check and daily biological calibration thresholds to be within ± 5 dB (± 10 dB at 6000 Hz) of baseline original biological calibration thresholds for the DOEHRS-HC system.

Performance Steps

1. Boot up DOEHRS-HC system to Windows.
 - a. Turn on power switch to system.
 - b. At computer prompt press Ctrl, Alt, and Delete at same time.
 - c. Type in Windows user name and password.

NOTE: Username and password are obtained from administrator.

2. Prepare functional check.
 - a. Using the mouse, double click the CCA-200 icon on the computer desktop.
 - b. At Welcome window click OK.
 - c. On the menu bar of the CCA-200 application, click Audiometer, Functional Check.

NOTE: Ensure Response button is plugged into ME500.

- d. Clean all rubber headphones with locally approved disinfectant.

NOTE: Disinfectant should not enter earphone. Do not use alcohol as it causes deterioration of the rubber.

3. Check frequency and intensity output.
 - a. Place headphones on your ears - red on right, blue on left.
 - b. Press the Response button to start the test.

NOTE: Frequency check (pitch) will start and be in the left ear followed by an intensity check (loudness) in the right ear.

- c. Did frequency and intensity tests change distinctly and without static?
 - (1) If yes, continue to step 4.
 - (2) If no, take station out of service and request repair per local SOP.

4. Check for crossover.

NOTE: Crossover is a continuity short that produces a tone in the nontested ear.

- a. Unplug left plug from wall jack panel and listen for crossover in right ear.
- b. Plug in left plug and push the Response button several times until a tone is present in the right ear.
- c. Unplug right plug from wall jack panel and listen for crossover in left ear.
- d. Plug in right plug.
- e. Was crossover present?
 - (1) If yes, take station out of service and request repair per local SOP.
 - (2) Repeat process on remaining stations beginning with 3.
- f. Remove headphones from your ears.
- g. Click Stop on the Functional Check box.
- h. Select booth(s) you are testing.
- i. Click Close on the Functional Check box.

Performance Steps

5. Determine the biological thresholds are within ± 5 dB of baseline (± 10 dB at 6000 Hz).

- a. Set up all ME500 biological calibrators.
 - (1) Place headphones on ME500 - red on right, blue on left.
 - (2) Unplug Response button from ME500.
 - (3) Ensure the booth door is closed.
- b. On the CCA-200 application menu bar, click Daily Calibration, Set.
- c. On the CCA-200 application menu bar, click Test, Start.
- d. If a certificate is printed, store certificate in accordance with local SOP.

NOTE: Biological test must be within ± 5 db (± 10 dB at 6000 Hz) of baseline original biological calibration audiogram. If it is not, remove station from service and request repair per local SOP.

- e. Using the mouse, double click the DOEHRS-HC icon.
- f. At the warning screen, click OK.
- g. Enter DOEHRS-HC username and password at logon prompt. Click OK.

NOTE: Username and password are obtained from the administrator. This username and password are different from step 1c.

- h. If this is not the first time you have logged on to the DOEHRS-HC or your password has not expired, go to step 5l.
- i. At the Password Has Expired window, click OK.
- j. Input old password, input new password, and verify new password. Click OK.
- k. At Password Updated window, click OK.
- l. At Daily Calibration Check window, click OK.
- m. At Referral window, click OK.
- n. On the DOEHRS-HC application menu bar, click File, Retrieve From Audiometer, All Stations.

NOTE: This is completed after all stations completed testing.

- o. At the bottom of the computer screen click DOEHRS-HC window.
- p. In the Listener window click the down arrow and select the serial number of your ME500. Click OK. If your ME500 is listed, go to step 5r.
- q. If your ME500 is not listed, type it into Listener box. Click OK.
- r. Click OK on the Biological Calibration Checks popup window.
- s. At the Biological Calibration Checks Completed window click OK.
- t. If the test failed, the biological calibration error will appear. Click YES to try again with the same ME500. Check the listener and make adjustments. Go to step 5c and repeat test.

NOTE: Adjustments can include but are not limited to the following: correct headphone placement, correct routing of cables.

- u. If biological thresholds are not within ± 5 dB of baseline (± 10 dB at 6000 Hz) take station out of service and request repair per local SOP.
- v. At bottom of screen click CCA-200 window.
- w. On the CCA-200 application menu bar. Click Test, Clear.

NOTE: Hearing thresholds should be replaced by NTs (nontest) and the daily calibration box should be empty.

6. Configure for patient testing.

- a. On the CCA-200 window click Audiometer, Test Configuration, click Standard Test, Close.
- b. Plug Response button into ME500.
- c. System is ready to conduct monitoring audiometry. (See task 081-830-2005.)

Performance Measures	<u>GO</u>	<u>NO GO</u>
1. Booted up DOEHRS-HC system to Windows.	—	—
a. Turned on power switch to system.		
b. At computer prompt, pressed Ctrl, Alt and Delete at same time.		
c. Typed in Windows user name and password.		
2. Prepared functional check at all stations.	—	—
a. Using the mouse, double clicked the CCA-200 icon on the computer desktop.		
b. At Welcome window, clicked OK.		
c. On the menu bar of the CCA-200 application, clicked Audiometer, Functional Check.		
d. Cleaned all rubber headphones with locally approved disinfectant.		
e. Placed headphones on ears - red on right, blue on left.		
f. Pressed the Response button to start the test. Frequency check (pitch) started and in the left ear followed by an intensity check (loudness) in the right ear.		
g. When a steady tone returned to the left ear, checked for crossover.		
(1) Unplugged left plug from wall jack panel and listened for crossover in right ear.		
(2) Plugged in left plug and pushed the Response button several times until a tone was present in the right ear.		
(3) Unplugged right plug from wall jack panel and listened for crossover in left ear.		
(4) Plugged in right plug.		
h. Removed headphones from ears.		
i. Clicked Stop on the Functional Check box.		
j. Selected booth(s) to be tested.		
k. Clicked Close on the Functional Check box.		
3. Took nonfunctional stations out of service and requested for repair per local SOP.	—	—
4. Determined biological thresholds were within tolerance ± 5 dB of baseline (± 10 dB at 6000 Hz).	—	—
5. Configured for patient testing.	—	—
a. On the CCA-200 window clicked Audiometer, Tested Configuration, clicked Standard Test, Closed.		
b. Plugged Response button into ME500.		
c. System was ready to conduct monitoring audiometry.		

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References

Required
None

Related
DA PAM 40-501

COMPLETE PURE-TONE AND SPEECH DIAGNOSTIC AUDIOMETRY

081-830-2001

Conditions: You have a patient who requires diagnostic audiometric evaluation. You will need a clinical audiometer with circuitry for pure-tone (air and bone conduction), speech, and masking (narrow band and speech); the CID spondaic word lists; the NU-6 word lists (recorded versions with tape player or CD player optional); an audiometric test booth; an otoscope with selection of specula; audiometric worksheet; and Table 7-1 of AR 40-501.

Standards: Conducted tests for pure-tone air conduction (AC) thresholds, bone conduction (BC) thresholds (if warranted), speech recognition thresholds (SRT), word recognition scores (WRS), and the performance intensity function for phonetically balanced (PI-PB) word lists. Drafted a clinical report in the SOAP format, indicating the validity indicators of the testing, the degree and type of hearing loss, and the pathology consistent with special test results. Also, for active duty soldiers, reported the level of H-profile consistent with test results.

Performance Steps

1. Interview the patient and review any available health records and record patient hearing and ear history in the "Subjective" section of the clinical report to include the reason the patient is present for a hearing test.
2. Perform an otoscopic examination of each ear.

- a. Instruct the patient.

NOTE: When giving instructions, always tell the patient what you are going to do, what they will experience, and what you need them to do. Ask if they have any questions.

- b. Conduct the examination.

- (1) Rest your hand or the backs of your fingers against the side of the patient's face or head. This precaution will prevent the speculum from scraping the external auditory canal (EAC) should the patient move suddenly.
 - (2) In the "Objective" section of the clinical report, record the presence of perforations, plaques, scarring, and pressure-equalizing tubes should any be present. The cone of light should be easily visible, so report its presence or absence. Note any abnormalities such as an air-fluid line, bubbles, a retracted TM, redness, etc.

3. Determine unmasked speech recognition thresholds (SRT) for each ear IAW "Exercises in Audiometry," Exercise 9, page 59.
- a. Seat the patient at an angle in the audiometric test booth so that he cannot see the tester outside the booth.
 - b. Familiarize the patient with the words on the spondee list by having him or her read them aloud.
 - c. Instruct the patient.

NOTE: When giving instructions, always tell the patient what you are going to do, what they will experience, and what you need them to do. Ask if they have any questions.

- d. Prepare the patient.
 - (1) Have him or her remove earrings and eyeglasses and position any long hair behind the ears. Have him or her remove gum, tobacco, etc. from the mouth.
 - (2) Ask the patient if he or she hears better in one ear over the other.
 - (3) Either place earphones over the ears, or insert the insert receivers in each ear.

Performance Steps

NOTE: If using earphones, make sure the red earphone is over the right ear and the blue over the left ear. Position the earphone cords behind the patient. Place the diaphragm of each earphone directly over the EAC of each ear. Finally tighten the headband to ensure that the earphones do not move.

- e. Set the attenuator to -10 dB HL and calibrate the speech circuit of the audiometer until both syllables of a spondee word peak at 0 dB (± 1 dB) on the VU meter.
- f. Find the start point for the SRT procedure.

- (1) Set the attenuator to the starting level of 30 dB HL. Set output to the better ear.

NOTE: If patient states one ear is not better, start procedure with the right ear.

- (2) Present one spondee.
 - (3) If the patient repeats the word correctly, decrease the hearing level in 10 dB steps while presenting one word at each level. Continue this procedure until a spondee is missed.
 - (4) If the patient does not respond at the initial 30 dB HL, raise the hearing level to 50 dB HL, and then in 10 dB steps, while presenting a spondee at each level, until the patient correctly repeats a word. When a word is repeated correctly, decrease intensity in 10 dB steps until a word is missed.
 - g. Determine SRT.
 - (1) As soon as a patient misses the first spondee, begin the threshold determination procedure. Raise the intensity in 5 dB steps, presenting one spondee at each level, until the patient is able to repeat the spondee.
 - (2) Each time the patient gets a word correct, decrease the hearing level by 10 dB and present another spondee. Every time the patient does not respond correctly at a given level, increase the hearing level by 5 dB and present another spondee.
 - (3) When a level is reached where the patient repeats at least three out of six of the spondees correctly, terminate the procedure and record the level on the audiometric worksheet as the SRT.
 - (4) Repeat steps 3f through 3g(3) for the opposite ear.

4. Complete unmasked pure-tone air conduction (AC) audiometry IAW "Exercises in Audiometry," Exercise 4, page 21.

- a. Instruct the patient, emphasizing the need to respond even if she or he only thinks the tone is present.
- b. Set Channel 1 of the audiometer to "tone" and the earphone to the better ear. Set the output selector to AC. Select a pulsed tone rather than a continuous tone.
- c. Begin the test at 1000 Hz.
- d. Find the start point for the procedure.
 - (1) Set the attenuator to 30 dB HL. Present the tone between 1 and 2 seconds.

CAUTION: It is very important to use different time intervals between tone presentations to prevent a pattern or rhythm that might cue the patient to respond.

- (2) If there is no response at the starting level of 30 dB HL, increase the intensity by 20 dB (50 dB HL) and go to step 4d(3). If there is a response at the starting level of 30 dB HL, go to step 4d(4).
 - (3) If there is no response at 50 dB HL, raise the intensity in 10 dB steps until a response is obtained or until the output limit of the audiometer is reached.
 - (4) As soon as a response is elicited, decrease the intensity in 10 dB steps, presenting a tone at each step, until no response is given. At this point, it is assumed that the level of the tone is below the patient's threshold, and threshold determination begins.

Performance Steps

- e. Determine pure-tone threshold.
 - (1) Raise the intensity of the tone in 5 dB steps until a response is seen.
 - (2) As soon as a response is obtained, lower the intensity by 10 dB.
 - (3) If a response is not obtained, increase the intensity in 5 dB steps until a response is seen.
 - (4) Repeat the procedure (down 10, up 5). The lowest level at which at least three out of six presentations produce responses is considered to be the individual's threshold.
 - (5) Record the threshold on the audiometric worksheet.
- f. Determine and record thresholds for each frequency above 1000 Hz in ascending order (e.g., 2000, 3000, 4000, 6000, 8000 Hz). If the thresholds at 1000 Hz and 2000 Hz differ by 20 dB or more, then determine threshold at 1500 Hz as well.
- g. After completing the testing at 8000 Hz, recheck 1000 Hz. The second threshold at 1000 Hz should be within ± 5 dB of the threshold determined for 1000 Hz the first time. If this is not the case, the reliability is questionable and the patient is reinstructed. Remeasure all previously obtained thresholds. State in the "Analysis" section of the clinical report whether the test/retest check at 1000 Hz is consistent with valid pure-tone thresholds.

NOTE: When plotting the threshold for 1000 Hz, record the better (lower) of the two results.

- h. After the 1000 Hz recheck, test 500 Hz and then 250 Hz.
- i. Compare the SRT for the test ear to the speech frequency average (SFA). If the values agree within ± 10 dB, test reliability is good. If not, reliability is questionable, so you must reinstruct the patient and remeasure all previously obtained thresholds. If reliable thresholds cannot be established, refer the patient to an audiologist; otherwise, continue the test procedure. State in the "Analysis" section of the clinical report whether the SRT/SFA agreement is consistent with valid pure-tone thresholds.
- j. Use the same procedure to determine thresholds for the opposite ear.

- 5. If any hearing loss is found by air conduction audiometry (threshold of 20 dB or greater), complete unmasked bone conduction pure-tone audiometry IAW "Exercises in Audiometry," Exercise 5, page 29; otherwise, go to step 6.

- a. Remove the earphones and instruct the patient on the bone conduction procedure.

NOTE: When giving instructions, always tell the patient what you are going to do, what they will experience, and what you need them to do. Ask if they have any questions.

- b. Position the bone oscillator.
 - (1) If the forehead is the test site, encircle the head with the head band so that it lies just above the ears. It should be snug but not excessively tight.
 - (2) If the mastoid process is the site, place the oscillator on the most prominent part of the mastoid process with no hair between the oscillator and the skin. Arrange the headband across the head at approximately a 45 degree angle to secure the oscillator.
- c. Set Channel 1 to "tone" and to "bone conduction."
- d. Beginning at 1000 Hz at 30 dB HL, determine threshold in the same manner as described in steps 4d(1) through 4e(5).
- e. Record the obtained threshold in the appropriate place on the audiometric worksheet.
- f. Determine thresholds for each frequency above 1000 Hz in ascending order.
- g. After testing 4000 Hz, recheck 1000 Hz. The second threshold at 1000 Hz should be within ± 5 dB of the first one. If this is not the case, test reliability is questionable and the patient is reinstructed. All previously obtained thresholds are remeasured.

NOTE: When plotting the threshold for 1000 Hz, record the better (lower) of the two results.

Performance Steps

- h. After the 1000 Hz recheck, test 500 Hz and then 250 Hz.
 - i. If the forehead is the test site, go to step 5j. If mastoid testing is used, move the oscillator to the opposite side of the head and determine thresholds by the same procedure; then go to step 5j.
 - j. Remove oscillator from patient.
 6. Complete masking at any air conduction frequency where the following is true: Air conduction (AC) threshold for the test ear (TE) minus interaural attenuation (IA) is greater than or equal to the bone conduction (BC) threshold of the nontest ear (NTE); where IA = 40 when using circumaural earphones and IA = 70 when using insert earphones.
 - a. Prepare equipment.
 - (1) Set the test channel stimulus to "tone" with the output to the AC earphone/insert of test ear.
 - (2) Select frequency to be tested.
 - (3) Set the level dial to the value previously obtained by unmasked AC testing.
 - (4) Set the masking channel to narrow-band noise (NBN).
 - (5) Set the output for the masking channel to the nontest ear (NTE.)
 - b. Instruct the patient and put earphones/inserts on him or her.
- NOTE: When giving instructions, always tell the patient what you are going to do, what they will experience, and what you need them to do. Ask if they have any questions.
- c. Complete the masking screening procedure.
 - (1) Set the masking channel to "continuously on."
 - (2) Slowly increase the intensity of the noise from 0 dB HL to the predetermined effective masking (EM) level (the AC threshold of the masked ear plus a 10 dB safety factor).
 - (3) Present a tone to the test ear at the level previously determined to be the threshold.
 - (4) If the patient responds, the masking procedure is finished.
 - (5) Record the threshold and the amount of EM used on the audiometric worksheet.
 - (6) If the patient does not respond, increase the intensity of the tone 5 dB and present again.
 - (7) If the patient responds now, the masking procedure is finished. Record the threshold, minus the 5 dB threshold shift attributed to central masking.
 - (8) If the patient still does not respond, perform the plateau masking procedure (step 6d) to ensure the proper amount of masking required to find the true threshold of the test ear.
 - d. Conduct the plateau masking procedure.
 - (1) Determine the new threshold of the test ear (with minimum EM in the nontest ear) by continuing to raise the intensity of the tone in the test ear until a response is elicited.
 - (2) After the patient responds to the tone, increase the level of the noise 5 dB and present the tone again.

NOTE: In this step the level of the tone is not increased before it is presented. Only the level of the masking noise is increased.

- (3) If the patient responds, raise the level of the noise 5 dB again and present the tone.
- (4) If the patient does not respond after the first 5 dB increase of the noise, increase the intensity of the tone in 5 dB steps until a response is noted.
- (5) Repeat this procedure until the patient responds to the tone at a given level with three consecutive 5 dB increases in the level of the masking noise.

Performance Steps

- (6) Record the new masked AC threshold of the test ear at each frequency (threshold is the response seen in the test ear after the plateau, minus 5 dB for central masking).
- (7) Record the amount of effective masking used in the nontest ear to obtain the true threshold in the test ear.

7. Conduct masking at any bone conduction frequency at which an air-bone gap in the test ear is 15 dB or more IAW "Exercises in Audiometry," Exercise 8, page 51.

- a. Prepare the equipment.
 - (1) Set the test ear channel to "tone" and "bone conduction."
 - (2) Select the desired frequency.
 - (3) Set the masking channel to NBN.
 - (4) Direct the masking output to the earphone of the NTE.
- b. Instruct the patient.

NOTE: When giving instructions, always tell the patient what you are going to do, what they will experience, and what you need them to do. Ask if they have any questions.

- c. Position the bone oscillator on either the mastoid or the forehead (same position as used in step 5).
- d. Place an insert earphone into the NTE, or place a supra-aural earphone over the NTE.
- e. Determine degree of occlusion effect (OE)

NOTE: Use this procedure for determining the OE for any test frequencies in the range of 250-1000 Hz. For the frequencies above this range, an OE of 0 dB can be assumed.

- (1) Redetermine the BC threshold with the earphone covering the NTE, or an insert receiver in the NTE, without the presence of masking noise.
- (2) Subtract the new (occluded) BC threshold from the original (unoccluded) BC threshold. This value is the OE for this frequency and will be used to calculate the effective masking level for this frequency.

f. Perform masking screening procedure.

- (1) Set the hearing level dial on the masking channel to 0 dB HL.
- (2) Set the masking channel so the noise is "continuously on."
- (3) Slowly increase the intensity of the noise to the EM level (the AC threshold of the masked ear plus a 10 dB safety factor) plus the occlusion effect for the test frequency from step 7e.
- (4) Present a tone to the test ear at the level of the unmasked threshold recorded on the audiometric worksheet in step 5.
- (5) If the patient responds, the masking procedure is completed for that frequency. Record the threshold and the amount of EM on the audiometric worksheet.
- (6) If the patient does not respond, increase the intensity of the tone 5 dB and present it again. If the patient now responds, the masking procedure is finished for this frequency. Subtract 5 dB for central masking and record the threshold on the audiometric worksheet.
- (7) If the patient still does not respond, you must plateau to ensure the proper amount of masking. Go to step 7g for the plateau procedure.

g. Perform the plateau method of masking if masked thresholds could not be determined in the screening procedure in step 7f.

- (1) Adjust the noise in the NTE so that it is set to the initial masking level from step 7f(3).
- (2) Raise the level of the tone in 5 dB steps until the patient responds.
- (3) Once the patient responds, raise the level of the noise in 5 dB steps three times, presenting a tone after each increase in the noise.

Performance Steps

- (4) If the patient responds to the tone with each increase in the intensity of the noise (without raising the level of the tone), a plateau has been reached, and you can assume that the threshold obtained is that of the test ear.
 - (5) If the patient does not respond to the tone three consecutive times with 5 dB increases in the level of the noise, continue to search for a plateau until the output level of the audiometer is reached or until the AC threshold of that ear is reached.
 - h. Remove all equipment from the patient's head.
 8. Determine the masked speech recognition threshold (SRT) if the unmasked SRT determined in step 3, minus the interaural attenuation (IA) (40 dB for headphones and 70 dB for insert receivers) equals or exceeds the lowest BC threshold of the nontest ear (NTE) (except 250 Hz), IAW "Exercises in Audiometry," Exercise 10, page 65. If this condition does not exist, go to step 9.
 - a. Set the speech output to the earphone or insert receiver coupled to the TE. Set the NTE to "speech noise."
 - b. Instruct the patient.
 - c. Do the screening procedure for SRT masking.
 - (1) Turn the noise channel to the "continuously on" position, while the attenuator is set at 0 dB HL, and then gradually raise the noise to the initial amount of EM (SRT of NTE plus a 10 dB safety factor).
 - (2) Set the output to the TE to the level of the unmasked SRT determined in step 3, and present six spondees to the TE.
- NOTE: Be sure to monitor the VU meter to ensure each syllable peaks at 0 dB (± 1 dB).
- (3) If the patient repeats 50 percent or more of the words, consider the original SRT correct. Record the masked SRT and the level of masking on the audiometric worksheet.
 - (4) If the patient does not repeat at least 50 percent of the words, increase the intensity of the spondees 5 dB and present six more words.
 - (5) If the patient repeats 50 percent or more of the words, subtract 5 dB for central masking and record the result as the masked SRT. Record the amount of masking on the audiometric worksheet also. If the patient does not repeat 50 percent of the spondees, complete the plateau method of masking in step 8d; otherwise, go to step 9.
 - d. Complete the plateau method of masking the SRT.
 - (1) Increase the level of the speech in 5 dB steps until the patient can repeat at least 50 percent of the spondees.
 - (2) Increase the level of the masking noise in 5 dB steps, presenting one or two spondees with each noise increment.
 - (3) If the patient does not correctly repeat the word, then increase the level of the speech 5 dB and present another spondee.
 - (4) If the word is correctly repeated, raise the noise 5dB and present another spondee.
 - (5) A plateau has been reached when three consecutive increases in the level of the masking noise does not produce a shift in the SRT.
 - e. Subtract 5 dB for central masking and record the masked SRT and the amount of EM used on the audiometric worksheet.

Performance Steps

9. Complete WRT for each ear, using masking if necessary. See "Exercises in Audiometry," Exercise 11, page 71 and Exercise 13, page 87.
 - a. Set the input to the test ear to "tape," "CD," or "microphone" depending on the method of word delivery established by the audiologist.
 - b. Set the level of presentation for the words in the test ear to 30 dB sensation level (SL) (SRT + 30 dB HL).
 - c. Instruct the patient.
 - d. Calibrate the speech circuit.
 - (1) For prerecorded tests of PB word lists, adjust the VU meter to "0" while playing the calibration tone on the tape or CD.
 - (2) For monitored live voice (MLV) presentation, utter the carrier phrase, "Say the word _____" several times and adjust the VU meter to 0 dB (± 1 dB) for the word "word."
 - e. Determine if masking is needed in the NTE.
 - (1) If the presentation level for the WRT (SRT + 30 dB HL) minus the IA (40 dB for supra-aural earphones; 70 dB for insert earphones) is equal to or greater than the lowest BC threshold of the NTE (except 250 Hz), go to step 9f to set up for masking.
 - (2) If the presentation level for the WRT (SRT + 30 dB HL) minus the IA (40 dB for supra-aural earphones; 70 dB for insert earphones) is NOT equal to or greater than the lowest BC threshold of the NTE (except 250 Hz), you do not need to mask the NTE. Go to step 9g.
 - f. Set up for masking the NTE while testing for word recognition in the TE.
 - (1) Calculate the amount of masking to use as the presentation level (SRT + 30 dB) minus IA, plus the largest air-bone gap at any frequency in the NTE (except 250 Hz), plus a 10 dB safety factor.
 - (2) Set the intensity of the masking channel to 0 dB HL; then set the masking channel to "continuously on." Gradually raise the intensity of speech noise in the NTE to the EM level calculated in step 9f(1).
 - g. Present the words from the word list (either NU-6 or CD-22), keeping count of how many are missed.
- NOTE: The audiologist determines whether you present the full 50-word list or a 25-word half list.
- h. On the audiometric worksheet, indicate which list was used, the sensation level of presentation, and the percentage of the list the patient repeated correctly (2% per word for the full 50-word list; 4% per word for the 25-word half list).
 - i. Repeat steps 9b through 9h for opposite ear.
10. Complete a performance intensity function for PB word lists (PI-PB function). See "Exercises in Audiometry," Exercise 12, page 81.
 - a. Do a PI-PB screening procedure for each ear.
 - (1) Using different versions of the PB list used to determine the word recognition score (WRS) in step 9, determine a new WRS in each ear (test ear with better WRS first) using a presentation level of 90 dB HL. Use the same procedures from steps 9e and 9f to determine the need for masking and the amount of masking to use in the NTE.
 - (2) Record the PI-PB WRS scores on the audiometric worksheet.

Performance Steps

- (3) Compare the WRS obtained at 90 dB HL to the WRS obtained at 30 dB SL. If the score obtained at 90 dB HL is at least 20 percent poorer than that obtained at 30 dB SL, the screening is considered positive; go to step 10b to do an entire PI-PB function. If there is less than 20 percent difference between the two scores, the screening test is considered negative; report in the "Objective" section of the SOAP report that the PI-PB screening procedure is negative.
 - b. Do a full PI-PB function on each ear if either ear is positive on the PI-PB screening described in step 10a.
 - (1) Obtain WRS scores for each ear at 10 dB SL, 30 dB SL, 50 dB SL, and 70 dB SL, if possible. Use a different word list each time.
 - (2) Calculate the PI-PB rollover ratio for each ear by subtracting the minimum WRS from the maximum WRS, and dividing the result by the maximum WRS.
 - (3) Report the value of the PI-PB rollover function in the "Objective" section of the SOAP report.
 - (4) If the PI-PB rollover ratio is at least 0.4, state in the "Analysis" section of the SOAP report that the PI-PB rollover function is consistent with a possible retrocochlear site of lesion. If the PI-PB ratio is less than 0.4, report in the "Analysis" section of the SOAP report that the PI-PB ratio is consistent with a cochlear site of lesion.
 11. Transcribe AC and BC thresholds from the audiometric worksheet to an audiogram form using the symbols indicated on the audiogram form being used.
- NOTE: For those frequencies that required masking, transcribe only the masked thresholds.
- a. Connect the AC thresholds for each ear with a line. Do not connect the BC thresholds.
 - b. Record the type and degree of hearing loss for each ear in the "Analysis" section of the SOAP report.
12. In the "Analysis" section of the clinical report, record the following:
 - a. Type and degree of hearing loss for each ear.
 - b. Validity of pure-tone thresholds based on 1000 Hz retest and PTA/SFA agreement.
 - c. Statement of PI-PB results as consistent with cochlear or retrocochlear results.
 - d. For active duty patients with normal hearing or a sensorineural hearing loss, state the level of H-profile consistent with the air conduction thresholds.

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

- | | | |
|--|---|---|
| 1. Interviewed the patient and reviewed any available health records, and recorded patient hearing and ear history in the "Subjective" section of the clinical report to include reason the patient is present for a hearing test. | — | — |
| 2. Performed an otoscopic examination of each ear. | — | — |
| a. Instructed the patient. | | |

NOTE: When giving instructions, told the patient what the technician was going to do, what the patient will experience, and what the patient needed to do.

- do. Asked if the patient had any questions.
- b. Conducted the examination.
 - (1) Rested the hand or the backs of the fingers against the side of the patient's face or head to prevent the speculum from scraping the external auditory canal (EAC).

Performance Measures**GO****NO
GO**

- (2) In the "Objective" section of the clinical report, recorded the presence of perforations, plaques, scarring, and pressure-equalizing tubes if any were present. Reported the presence or absence of the cone of light. Noted any abnormalities such as an air-fluid line, bubbles, a retracted TM, redness, etc.

3. Determined unmasked speech-recognition thresholds (SRT) for each ear. ——— ———
- a. Seated the patient at an angle in the audiometric test booth so that he or she could not see the tester outside the booth.
 - b. Familiarized the patient with the words on the spondee list by having him or her read them aloud.
 - c. Instructed the patient.

NOTE: When giving instructions, told the patient what the technician was going to do, what the patient will experience, and what the patient needed to do. Asked if the patient had any questions.

- d. Prepared the patient.
 - (1) Had him or her remove earrings and eyeglasses and position any long hair behind the ears. Had him or her remove gum, tobacco, etc. from the mouth.
 - (2) Asked the patient if he or she hears better in one ear over the other.
 - (3) Either placed earphones over the ears or inserted the insert receivers in each ear.

NOTE: If using earphones, made sure the red earphone was over the right ear and the blue over the left ear. Positioned the earphone cords behind the patient. Placed the diaphragm of each earphone directly over the external auditory canal (EAC) of each ear. Finally tightened the headband to ensure that the earphones did not move.

- e. Set the attenuator to -10 dB HL and calibrated the speech circuit of the audiometer until both syllables of a spondee word peaked at 0 dB (± 1 dB) on the VU meter.
- f. Found the start point for the SRT procedure.
 - (1) Set the attenuator to the starting level of 30 dB HL. Set output to the better ear.

NOTE: If patient stated one ear was not better, started procedure with the right ear.

- (2) Presented one spondee.
- (3) If the patient repeated the word correctly, decreased the hearing level in 10 dB steps while presenting one word at each level. Continued this procedure until a spondee was missed.
- (4) If the patient did not respond at the initial 30 dB HL, raised the hearing level to 50 dB HL, and then in 10 dB steps, while presenting a spondee at each level, until the patient correctly repeated a word. When a word was repeated correctly, decreased intensity in 10 dB steps until a word was missed.

Performance Measures**GO****NO
GO**

g. Determined SRT.

- (1) As soon as a patient missed the first spondee, began the threshold determination procedure. Raised the intensity in 5 dB steps, presenting one spondee at each level, until the patient was able to repeat the spondee.
- (2) Each time the patient got a word correct, decreased the hearing level by 10 dB and presented another spondee. Every time the patient did not respond correctly at a given level, increased the hearing level by 5 dB and presented another spondee.
- (3) When a level was reached where the patient repeated at least three out of six of the spondees correctly, terminated the procedure and recorded the level on the audiometric worksheet as the SRT.
- (4) Repeated steps 3f through 3g(3) for the opposite ear.

4. Completed unmasked pure-tone air conduction (AC) audiometry.

- a. Instructed the patient, emphasizing the need to respond even if she or he only thought the tone was present.
- b. Set Channel 1 of the audiometer to "tone" and the earphone to the better ear. Set the output selector to AC. Selected a pulsed tone rather than a continuous tone.
- c. Began the test at 1000 Hz.
- d. Found the start point for the procedure.
 - (1) Set the attenuator to 30 dB HL. Presented the tone between 1 and 2 seconds.

CAUTION: It is very important to use different time intervals between tone presentations to prevent a pattern or rhythm that might cue the patient to respond.

- (2) If there was no response at the starting level of 30 dB HL, increased the intensity by 20 dB (50 dB HL) and went to step 4d(3). If there was a response at the starting level of 30 dB HL, went to step 4d(4).
 - (3) If there was no response at 50 dB HL, raised the intensity in 10 dB steps until a response was obtained or until the output limit of the audiometer was reached.
 - (4) As soon as a response was elicited, decreased the intensity in 10 dB steps, presenting a tone at each step, until no response was given.
- e. Determined pure-tone threshold.
- (1) Raised the intensity of the tone in 5 dB steps until a response was seen.
 - (2) As soon as a response was obtained, lowered the intensity by 10 dB.
 - (3) If a response was not obtained, increased the intensity in 5 dB steps until a response was seen.
 - (4) Repeated the procedure (down 10, up 5). The lowest level at which at least three out of six presentations produced responses was considered to be the individual's threshold.
 - (5) Recorded the threshold on the audiometric worksheet.

Performance Measures**GO****NO
GO**

- f. Determined and recorded thresholds for each frequency above 1000 Hz in ascending order (e.g., 2000, 3000, 4000, 6000, 8000 Hz). If the thresholds at 1000 Hz and 2000 Hz differed by 20 dB or more, then determined threshold at 1500 Hz as well.
- g. After completing the testing at 8000 Hz, rechecked 1000 Hz. The second threshold at 1000 Hz should have been within ± 5 dB of the threshold determined for 1000 Hz the first time. If this was not the case, the reliability was questionable and the patient was reinstructed. Remeasured all previously obtained thresholds. Stated in the "Analysis" section of the clinical report whether the test/retest check of 1000 Hz was consistent with valid pure-tone thresholds.

NOTE: When plotting the threshold for 1000 Hz, recorded the better (lower) of the two results.

- h. After the 1000 Hz recheck, tested 500 Hz and then 250 Hz.
- i. Compared the SRT for the test ear to the speech frequency average (SFA). If the values agree within ± 10 dB, test reliability was good. If not, reliability was questionable, so reinstructed the patient and remeasured all previously obtained thresholds. If reliable thresholds were not established, referred the patient to an audiologist; otherwise, continued the test procedure. Stated in the "Analysis" section of the clinical report whether the SFA/SRT agreement was consistent with valid pure-tone thresholds.
- j. Used the same procedure to determine thresholds for the opposite ear.

- 5. If any hearing loss was found by air conduction audiometry (threshold of 20 dB or greater), completed unmasked bone conduction pure-tone audiometry; otherwise, went to step 6.

- a. Removed the earphones and instructed the patient on the bone conduction procedure.

NOTE: When giving instructions, told the patient what the technician was going to do, what the patient will experience, and what the patient needed to do. Asked if the patient had any questions.

- b. Positioned the bone oscillator.
 - (1) If the forehead was the test site, encircled the head with the headband so that it lay just above the ears. It should have been snug but not excessively tight.
 - (2) If the mastoid process was the site, placed the oscillator on the most prominent part of the mastoid process with no hair between the oscillator and the skin. Arranged the headband across the head at approximately a 45 degree angle to secure the oscillator.
- c. Set Channel 1 to "tone" and to "bone conduction."
- d. Beginning at 1000 Hz at 30 dB HL, determined threshold in the same manner as described in steps 4d(1) through 4e(5).
- e. Recorded the obtained threshold in the appropriate place on the audiometric worksheet.
- f. Determined thresholds for each frequency above 1000 Hz in ascending order.

Performance Measures**GO****NO
GO**

- g. After testing 4000 Hz, rechecked 1000 Hz.. The second threshold at 1000 Hz should have been within ± 5 dB of the first one. If this was not the case, test reliability was questionable and the patient was reinstructed. All previously obtained thresholds were remeasured.

NOTE: When plotting the threshold for 1000 Hz, recorded the better (lower) of the two results.

- h. After the 1000 Hz recheck, tested 500 Hz and then 250 Hz.
- i. If the forehead was the test site, went to step 5j. If mastoid testing was used, moved the oscillator to the opposite side of the head and determined thresholds by the same procedure; then went to step 5j.
- j. Removed oscillator from patient.

- 6. Completed masking at any air conduction frequency where the following is true: Air conduction (AC) threshold for the test ear (TE) minus interaural attenuation (IA) was greater than or equal to the bone conduction (BC) threshold of the nontest ear (NTE); where IA = 40 when using circumaural earphones and IA = 70 when using insert earphones.

- a. Prepared equipment.

- (1) Set the test channel stimulus to "tone" with the output to the AC earphone/insert of test ear.
- (2) Selected frequency to be tested.
- (3) Set the level dial to the value previously obtained by unmasked AC testing.
- (4) Set the masking channel to narrow-band noise (NBN).
- (5) Set the output for the masking channel to the nontest ear (NTE).

- b. Instructed the patient and put earphones/inserts on him or her.

NOTE: When giving instructions, told the patient what the technician was going to do, what the patient will experience, and what the patient needed to do. Asked if the patient had any questions.

- c. Completed the masking screening procedure.

- (1) Set the masking channel to "continuously on."
- (2) Slowly increased the intensity of the noise from 0 dB HL to the predetermined effective masking (EM) level (the AC threshold of the masked ear plus a 10 dB safety factor).
- (3) Presented a tone to the test ear at the level previously determined to be the threshold.
- (4) If the patient responded, the masking procedure was ended for that frequency.
- (5) Recorded the threshold and the amount of EM used on the audiometric worksheet.
- (6) If the patient did not respond, increased the intensity of the tone 5 dB and presented again.
- (7) If the patient responded then, the masking procedure was ended for that frequency. Recorded the threshold, minus the 5 dB threshold shift attributed to central masking.
- (8) If the patient still did not respond, performed the plateau masking procedure (step 6d) to ensure the proper amount of masking required to find the true threshold of the test ear.

Performance Measures**GO****NO
GO**

d. Conducted the plateau masking procedure.

- (1) Determined the new threshold of the test ear (with minimum EM in the nontest ear) by continuing to raise the intensity of the tone in the test ear until a response was elicited.
- (2) After the patient responded to the tone, increased the level of the noise 5 dB and presented the tone again.

NOTE: In this step the level of the tone is not increased before it is presented. Only the level of the masking noise is increased.

- (3) If the patient responded, raised the level of the noise 5 dB again and presented the tone.
- (4) If the patient did not respond after the first 5 dB increase of the noise, increased the intensity of the tone in 5 dB steps until a response was noted.
- (5) Repeated this procedure until the patient responded to the tone at a given level with three consecutive 5 dB increases in the level of the masking noise.
- (6) Recorded the new masked AC threshold of the test ear at each frequency (threshold is the response seen in the test ear after the plateau, minus 5 dB for central masking).
- (7) Recorded the amount of effective masking used in the nontest ear to obtain the true threshold in the test ear.

7. Conducted masking at any bone conduction frequency at which an air-bone gap in the test ear is 15 dB or more.

a. Prepared the equipment.

- (1) Set the test ear channel to "tone" and "bone conduction."
- (2) Selected the desired frequency.
- (3) Set the masking channel to NBN.
- (4) Directed the masking output to the earphone of the NTE.

b. Instructed the patient.

NOTE: When giving instructions, told the patient what the technician was going to do, what the patient will experience, and what the patient needed to do.

do. Asked if the patient had any questions.

c. Positioned the bone oscillator on either the mastoid or the forehead (same position as used in step 5).

d. Placed an insert earphone into the NTE, or placed a supra-aural earphone over the NTE.

e. Determined degree of occlusion effect (OE).

NOTE: Used this procedure for determining the OE for any test frequencies in the range of 250-1000 Hz. For the frequencies above this range, an OE of 0 dB can be assumed.

- (1) Redetermined the BC threshold with the earphone covering the NTE, or an insert receiver in the NTE, without the presence of masking noise.
- (2) Subtracted the new (occluded) BC threshold from the original (unoccluded) BC threshold. This value is the OE for this frequency and was used to calculate the effective masking level for this frequency.

Performance Measures**GO****NO
GO**

- f. Performed masking screening procedure.
 - (1) Set the hearing level dial on the masking channel to 0 dB HL.
 - (2) Set the masking channel so the noise is "continuously on."
 - (3) Slowly increased the intensity of the noise to the EM level (the AC threshold of the masked ear plus a 10 dB safety factor) plus the occlusion effect for the test frequency from step 7e.
 - (4) Presented a tone to the test ear at the level of the unmasked threshold recorded on the audiometric worksheet in step 5.
 - (5) If the patient responded, the masking procedure was ended for that frequency. Recorded the threshold and the amount of EM on the audiometric worksheet.
 - (6) If the patient did not respond, increased the intensity of the tone 5 dB and presented it again. If the patient responded then, the masking procedure was ended for this frequency. Subtracted 5 dB for central masking and recorded the threshold on the audiometric worksheet.
 - (7) If the patient still did not respond, performed plateau to ensure the proper amount of masking (step 7g for the plateau procedure).
 - g. Performed the plateau method of masking if masked thresholds could not be determined in the screening procedure in step 7f.
 - (1) Adjusted the noise in the NTE so that it was set to the initial masking level from step 7f(3).
 - (2) Raised the level of the tone in 5 dB steps until the patient responded.
 - (3) Once the patient responded, raised the level of the noise in 5 dB steps three times, presenting a tone after each increase in the noise.
 - (4) If the patient responded to the tone with each increase in the intensity of the noise (without raising the level of the tone), a plateau was reached.
 - (5) If the patient did not respond to the tone three consecutive times with 5 dB increases in the level of the noise, continued to search for a plateau until the output level of the audiometer was reached or until the AC threshold of that ear was reached.
 - h. Removed all equipment from the patient's head.
8. Determined the masked speech recognition threshold (SRT) if the unmasked SRT determined in step 3, minus the interaural attenuation (IA) (40 dB for headphones and 70 dB for insert receivers) equaled or exceeded the lowest BC threshold of the NTE (except 250 Hz). If this condition did not exist, went to step 9.
- a. Set the speech output to the earphone or insert receiver coupled to the TE. Set the NTE to "speech noise."
 - b. Instructed the patient.

Performance Measures**GO****NO
GO**

- c. Did the screening procedure for SRT masking.
 - (1) Turned the noise channel to the "continuously on" position, while the attenuator was set at 0 dB HL, and then gradually raised the noise to the initial amount of EM (SRT of NTE plus a 10 dB safety factor).
 - (2) Set the output to the TE to the level of the unmasked SRT determined in step 3, and presented six spondees to the TE.

NOTE: Was sure to monitor the VU meter to ensure each syllable peaked at 0 dB (± 1 dB).

- (3) If the patient repeated 50 percent or more of the words, considered the original SRT correct. Recorded the masked SRT and the level of masking on the audiometric worksheet.
 - (4) If the patient did not repeat at least 50 percent of the words, increased the intensity of the spondees 5 dB and presented six more words.
 - (5) If the patient repeated 50 percent or more of the words, subtracted 5 dB for central masking and recorded the result as the masked SRT. Recorded the amount of masking on the audiometric worksheet also. If the patient did not repeat 50 percent of the spondees, completed the plateau method of masking in step 8d; otherwise, went to step 9.
- d. Completed the plateau method of masking the SRT.
 - (1) Increased the level of the speech in 5 dB steps until the patient could repeat at least 50 percent of the spondees.
 - (2) Increased the level of the masking noise in 5 dB steps, presenting one or two spondees with each noise increment.
 - (3) If the patient did not correctly repeat the word, then increased the level of the speech 5 dB and presented another spondee.
 - (4) If the word was correctly repeated, raised the noise 5dB and presented another spondee.
 - (5) A plateau was reached when three consecutive increases in the level of the masking noise did not produce a shift in the SRT.
- e. Subtracted 5 dB for central masking and recorded the masked SRT and the amount of EM used on the audiometric worksheet.

9. Completed WRT for each ear, using masking if necessary.

- a. Set the input to the test ear to "tape," "CD," or "microphone" depending on the method of word delivery established by the audiologist.
- b. Set the level of presentation for the words in the test ear to 30 dB sensation level (SL) (SRT + 30 dB HL).
- c. Instructed the patient.
- d. Calibrated the speech circuit.
 - (1) For prerecorded tests of PB word lists, adjusted the VU meter to "0" while playing the calibration tone on the tape or CD.
 - (2) For monitored live voice (MLV) presentation, uttered the carrier phrase, "Say the word _____" several times and adjusted the VU meter to 0 dB (± 1 dB) for the word "word."

Performance Measures**GO****NO
GO**

- e. Determined if masking was needed in the NTE.
 - (1) If the presentation level for the WRT (SRT + 30 dB HL) minus the IA (40 dB for supra-aural earphones; 70 dB for insert earphones) is equal to or greater than the lowest BC threshold of the NTE (except 250 Hz), went to step 9f to set up for masking.
 - (2) If the presentation level for the WRT (SRT + 30 dB HL) minus the IA (40 dB for supra-aural earphones; 70 dB for insert earphones) was NOT equal to or greater than the lowest BC threshold of the NTE (except 250 Hz), did not mask the NTE. Went to step 9g.
- f. Set up for masking the NTE while testing for word recognition in the TE.
 - (1) Calculated the amount of masking to use as the presentation level (SRT + 30 dB) minus IA, plus the largest air-bone gap at any frequency in the NTE (except 250 Hz), plus a 10 dB safety factor.
 - (2) Set the intensity of the masking channel to 0 dB HL; then set the masking channel to "continuously on." Gradually raised the intensity of speech noise in the NTE to the EM level calculated in step 9f(1).
- g. Presented the words from the word list (either NU-6 or CD-22), keeping count of how many were missed.

NOTE: The audiologist determines whether you present the full 50-word list or a 25-word half list.

- h. On the audiometric worksheet, indicated which list was used, the sensation level of presentation, and the percentage of the list the patient repeated correctly (2% per word for the full 50-word list; 4% per word for the 25-word half list).
 - i. Repeated steps 9b through 9h for opposite ear.
10. Completed a performance intensity function for PB word lists (PI-PB function). _____
- a. Did a PI-PB screening procedure for each ear.
 - (1) Using different versions of the PB list used to determine the word recognition score (WRS) in step 9, determined a new WRS in each ear (test ear with better WRS first) using a presentation level of 90 dB HL. Used the same procedures from step 9e and 9f to determine the need for masking and the amount of masking to use in the NTE.
 - (2) Recorded the PI-PB WRS scores on the audiometric worksheet.
 - (3) Compared the WRS obtained at 90 dB HL to the WRS obtained at 30 dB SL. If the score obtained at 90 dB HL was at least 20 percent poorer than that obtained at 30 dB SL, the screening was considered positive; went to step 10b and did an entire PI-PB function. If there was less than 20 percent difference between the two scores, the screening test was considered negative; reported in the "Objective" section of the SOAP report that the PI-PB screening procedure was negative.

Performance Measures**GO****NO
GO**

- b. Did a full PI-PB function on each ear if either ear was positive on the PI-PB screening described in step 10a.
 - (1) Obtained WRS scores for each ear at 10 dB SL, 30 dB SL, 50 dB SL, and 70 dB SL, if possible. Used a different word list each time.
 - (2) Calculated the PI-PB rollover ratio for each ear by subtracting the minimum WRS from the maximum WRS, and dividing the result by the maximum WRS.
 - (3) Reported the value of the PI-PB rollover function in the "Objective" section of the SOAP report.
 - (4) If the PI-PB rollover ratio was at least 0.4, stated in the "Analysis" section of the SOAP report that the PI-PB rollover function was consistent with a possible retrocochlear site of lesion. If the PI-PB ratio was less than 0.4, reported in the "Analysis" section of the SOAP report that the PI-PB ratio was consistent with a cochlear site of lesion.

- 11. Transcribed AC and BC thresholds from the audiometric worksheet to an audiogram form using the symbols indicated on the audiogram form being used. ——— ———

NOTE: For those frequencies that required masking, transcribed only the masked thresholds.

- a. Connected the AC thresholds for each ear with a line. Did not connect the BC thresholds.
- b. Recorded the type and degree of hearing loss for each ear in the "Analysis" section of the SOAP report.

- 12. In the "Analysis" section of the clinical report recorded the following: ——— ———
 - a. Type and degree of hearing loss for each ear.
 - b. Validity of pure-tone thresholds based on 1000 Hz retest and SFA/SRT agreement.
 - c. Statement of PI-PB results as consistent with cochlear or retrocochlear results.
 - d. For active duty patients with normal hearing or a sensorineural hearing loss, stated the level of H-profile consistent with the air conduction thresholds.

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References**Required**

AR 40-501
EXERCISES IN AUDIOMETRY

Related

INTRODUCTION TO AUDIOLOGY

CONDUCT ACOUSTIC IMMITTANCE MEASUREMENTS

081-830-2002

Conditions: You have a patient requiring acoustic immittance testing. Your immittance unit has already been turned on and calibrated for the day. You will need an immittance data form and an otoscope and probe tips.

Standards: Transcribed tympanogram to the worksheet, and recorded acoustic reflex thresholds and acoustic reflex decay data. In the "Analysis" section of the SOAP report, stated consistency of immittance results with possible site-of-lesion.

Performance Steps

1. Complete an otoscopic examination of each ear.

2. Instruct patient.

NOTE: When giving instructions, always tell the patient what you are going to do, what they will experience, and what you need them to do. Ask if they have any questions.

3. Prepare the patient for the immittance procedure. See "Exercises in Audiometry," Exercise 14, page 91.

NOTE: Exercise 14, "Acoustic Immittance", in "Exercises in Audiometry" describes the manual procedure for acquiring acoustic immittance measurements. That is useful knowledge for the technician, but the procedures described in these performance steps focuses on operation of the automatic immittance units found in virtually all Army audiology clinics.

- a. Select a probe tip you judge to be the right size for the patient's external auditory canal (EAC), and place the tip on the probe(s).
- b. Pulling the pinna up and back, place the probe securely into the EAC of the probe ear to get an airtight seal. Place the earphone over the nonprobe ear.

NOTE: Some immittance units use an insert earphone for the nonprobe ear rather than the supra-aural earphone.

4. Perform the tympanometry procedure.

- a. Initiate the automatic tympanometry procedure. If the airtight seal is not maintained, reseat the probe or replace the probe tip with a different size until an airtight seal can be maintained.
- b. Transcribe the tympanogram to the immittance worksheet. If a point of maximum compliance is observed, record the amount of static compliance and the amount of middle ear air pressure at the point of maximum compliance.
- c. Record the EAC volume (cc).

5. Determine contralateral acoustic reflex thresholds (ARTs) for 500, 1000, 2000, and 4000 Hz.

- a. Adjust the pressure to the point of maximum compliance from step 4b.
- b. Set the frequency of the reflex-activating signal (RAS) to 1000 Hz, and the intensity to 70 dB HL. Present the tone for 1 or 2 seconds.

NOTE: An acoustic reflex is indicated by a decrease in compliance of at least 0.02 ml.

- c. If a 0.02 ml compliance change is not seen at 70 dB HL, increase the intensity of the RAS in 10 dB steps until the 0.02 ml compliance decrease is seen. Next, reduce the intensity of the RAS 5 dB and retest.
- d. Record as ART the lowest intensity at which a compliance change of 0.02 ml or greater is seen.

Performance Steps

- e. Repeat steps 5a through 5d for 2000 Hz, 4000 Hz, and 500 Hz.
 - f. Calculate the acoustic reflex sensation levels by subtracting the pure-tone thresholds from the ARTs.
6. Record ipsilateral ARTs for 1000 and 2000 Hz. The procedure is the same as step 5 except that you present the RAS to the probe ear.
7. Perform the acoustic reflex decay procedure contralaterally at 500 and 1000 Hz at 10 dB SL (re: ART).
 - a. Present an RAS of 10 dB SL (re: ART) for 500 Hz contralaterally.
 - b. If reflex decay is positive, record the number of seconds required for the compliance to reach the 50% value. If no reflex decay is present, record "10+" on the immittance worksheet.
 - c. Repeat steps 7a and 7b for 1000 Hz.
8. In the "Analysis" section of the SOAP report, make statements about the ear and hearing conditions with which the immittance data are consistent for each ear.
 - a. State that tympanometric data are consistent with normal or negative middle ear air pressure, and with no or low or normal or high compliance of the tympanic membrane.
 - b. State whether acoustic reflex thresholds are absent or present at sensation levels consistent with possible conductive or sensorineural or retrocochlear pathology.
 - c. State that acoustic reflex decay testing is consistent with cochlear or retrocochlear pathology.

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

- | | | |
|--|-------|-------|
| 1. Completed an otoscopic examination of each ear. | _____ | _____ |
| 2. Instructed the patient. | _____ | _____ |
| <i>NOTE:</i> When giving instructions, told the patient what the technician was going to do, what the patient will experience, and what the patient needed to do. Asked if the patient had any questions. | | |
| 3. Prepared the patient for the immittance procedure. See "Exercises in Audiometry," Exercise 14, page 91. | _____ | _____ |
| <ol style="list-style-type: none"> a. Selected a probe tip judged to be the right size for the patient's external auditory canal (EAC), and placed the tip on the probe(s). b. Pulling the pinna up and back, placed the probe securely into the EAC of the probe ear to get an airtight seal. Placed the earphone over the nonprobe ear. | | |
| <i>NOTE:</i> Some immittance units use an insert earphone for the nonprobe ear rather than the supra-aural earphone. | | |
| 4. Performed the tympanometry procedure. | _____ | _____ |
| <ol style="list-style-type: none"> a. Initiated the automatic tympanometry procedure. If the airtight seal was not maintained, resealed the probe or replaced the probe tip with a different size until an airtight seal could be maintained. b. Transcribed the tympanogram to the immittance worksheet. If a point of maximum compliance was present, recorded the amount of static compliance and the middle ear air pressure at the point of maximum compliance. | | |

Performance Measures	<u>GO</u>	<u>NO GO</u>
c. Recorded the EAC volume (cc).		
5. Determined contralateral acoustic reflex thresholds (ARTs) for 500, 1000, 2000, and 4000 Hz.	—	—
a. Adjusted the pressure to the point of maximum compliance from step 4b.		
b. Set the frequency of the reflex-activating signal (RAS) to 1000 Hz, and the intensity to 70 dB HL. Presented the tone for 1 or 2 seconds.		
<i>NOTE:</i> An acoustic reflex is indicated by a decrease in compliance of at least 0.02 ml.		
c. If a 0.02 ml compliance change was not seen at 70 dB HL, increased the intensity of the RAS in 10 dB steps until the 0.02 ml compliance decrease was seen. Next, reduced the intensity of the RAS 5 dB and retested.		
d. Recorded for ART the lowest intensity at which a compliance change of 0.02 ml or greater was seen.		
e. Repeated steps 5a through 5d for 2000 Hz, 4000 Hz, and 500 Hz.		
f. Calculated the acoustic reflex sensation levels by subtracting the pure-tone thresholds from the ARTs.		
6. Recorded ipsilateral ARTs for 1000 and 2000 Hz. (The procedure is the same as step 5 except that the RAS was presented through the probe.)	—	—
7. Performed the acoustic reflex decay procedure contralaterally at 500 and 1000 Hz at 10 dB SL (re: ART).	—	—
a. Presented an RAS of 10 dB SL (re: ART) for 500 Hz contralaterally.		
b. If reflex decay was positive, recorded the number of seconds required for the compliance to reach the 50% value. If no reflex decay was present, recorded "+10" on the immittance worksheet.		
c. Repeated steps 7a and 7b for 1000 Hz.		
8. In the "Analysis" section of the SOAP report, made statements about the ear and hearing conditions with which the immittance data were consistent for each ear.	—	—
a. Stated whether tympanometric data were consistent with normal or negative middle ear air pressure, and with no or low or normal or high compliance of the tympanic membrane.		
b. Stated whether acoustic reflex thresholds were absent or present at sensation levels consistent with possible conductive or sensorineural or retrocochlear pathology.		
c. Stated whether the acoustic reflex decay testing was consistent with cochlear or retrocochlear pathology.		

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References

Required

EXERCISES IN AUDIOMETRY

Related

INTRODUCTION TO AUDIOLOGY

PERFORM OTOACOUSTIC EMISSION (OAE) SCREENING

081-830-2008

Conditions: You have a patient who requires an otoacoustic emission screening. You will need an evoked OAE system, computer, probe tips, otoscope, speculae, and a quiet room.

Standards: Performed otoacoustic emission screening with minimal noise interference.

Performance Steps

1. Boot up the system and set up equipment for OAE testing.
 - a. Ensure that probe tubes are not cracked, broken, or blocked with debris.
 - b. Turn on OAE system first, and then computer.

NOTE: The OAE software will automatically start. No other software should be running.

2. Prepare OAE and patient for testing.
 - a. Perform an otoscopic examination of the patient's ears to ensure that there are no contraindications.

NOTE: Absence of a normal otoscopic exam is a contraindication for OAE testing. Refer patient to primary care.

- b. Conduct tympanometry IAW task 081-830-2002 and record compliance, volume, and type.
 - c. Instruct patient to remain as quiet as possible with minimal movements.

NOTE: Tell the patient: "You will be seated in this sound-treated room. I will place this probe snugly into your ear, which will produce a series of clicks. Please sit quietly during the test sessions, each of which will last about one minute. You do not need to respond to the clicks or do anything but remain quiet. Do you have any questions?"

- d. Create a new patient record and input all demographic data IAW local policy and procedures.
 - e. Choose test parameters from pull down menus.
 - (1) Select Spontaneous, Distortion Product, or Transient.
 - (2) Select ear (R or L).
 - f. With the correct probe tip chosen, place probe tube in patient's ear.

NOTE: The probe tube does not require a hermetic seal to complete testing.

3. Conduct otoacoustic emissions test.
 - a. Start the test.

NOTE: A graphical representation of the otoacoustic emissions and the noise floor will appear across the screen. Ensure the patient remains quiet and still throughout testing.

- b. Click "SAVE" button when testing for ear is complete.

NOTE: To repeat testing on the opposite ear, select either "RIGHT" or "LEFT" ear icon.

4. Record results IAW local SOPs.

Performance Measures

<u>GO</u>	<u>NO GO</u>
-----------	------------------

- | | | |
|---|-------|-------|
| 1. Booted up system and set up equipment for OAE testing. | _____ | _____ |
| 2. Prepared OAE equipment and patient for testing. | _____ | _____ |
| 3. Conducted otoacoustic emissions test. | _____ | _____ |
| 4. Recorded results IAW local SOPs. | _____ | _____ |

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

CONDUCT MONITORING AUDIOMETRY

081-830-2005

Conditions: You have a person(s) enrolled in the hearing conservation program. You will need patient's medical records, patient's demographic information sheet, local record keeping SOP, and Defense Occupational Environmental Health Readiness System - Hearing Conservation (DOEHRS-HC) that has completed a daily valid functional check.

Standards: Established a baseline audiogram (DD Form 2215) in the DOEHRS-HC database if one did not exist. Identified any significant threshold shift (STS) from baseline after a periodic hearing check (DD Form 2216).

Performance Steps

1. Assign patient(s) to a testing station.
2. Position patient(s) in a testing station and prepare for testing.
 - a. Brief the patient(s) to listen for instructions over the headphones.
 - b. Instruct the patient(s) to place headphones on ears - blue on left, red on right.

3. Begin testing.

NOTE: While the patient(s) are being tested, the technician will enter data into the DOEHRS-HC system. Most actions will be accomplished by clicking on various menus and tool bars.

- a. Using the mouse, click the CCA-200 window at the bottom of the screen.
- b. On the CCA-200 menu bar click Test, Start.

NOTE: For multiple stations, the Select Booth(s) to Start window appears. Select booths that will be in use and click All Enabled Booths button.

4. Enter/verify demographic data.
 - a. Click the DOEHRS-HC window at the bottom of the screen.
 - b. Review patient's medical records for DD Form 2215.

NOTE: DD Form 2215 can be used to verify or retrieve information about a patient.

- c. Using the mouse, place cursor over the IDN box and enter the SSN (do not use hyphens between numbers). Hit Enter.

NOTE: If a DD Form 2215 is already in the system, the demographic information should appear in the demographic data boxes.

- d. Cursor will appear in the Last Name field in the demographic data window. Enter or check the demographic data.
 - (1) DOB format must include four characters for year (e.g., mm/dd/yyyy).
 - (2) Do not skip any of the demographic fields.
 - (3) Data must be entered in order.
 - (4) Type in date in the highlighted field to save time or using mouse, select the data from the drop down menu if available.

NOTE: You MUST use the Tab key to move from field to field or you may lose data when you print the test results.

- e. UIC/WIC field.
 - (1) Using mouse select drop down arrow and select patient's UIC/WIC.
 - (2) If UIC/WIC is present select it and continue with demographic information. If patient's UIC/WIC is not present, double click UIC/WIC field.
 - (3) At UIC/WIC window click New UIC/WIC
 - (4) Find UIC/WIC in patient's records.
 - (5) Enter UIC/WIC data and click Save.

Performance Steps

(6) Close window.

5. Determine appropriate audiogram type.

- a. YES is already selected for Exposed to Hazardous Noise field.
- b. If a DD Form 2215 cannot be found in patient's medical record or in database, appropriate test is a DD Form 2215.
- c. Using mouse, click on the arrow in the Reason for Audiogram field and select appropriate reason for performing the test (DD Form 2215 or DD Form 2216).

NOTE: If DD Form 2216 is selected, this field is left blank.

- d. Using mouse, click on the arrow in the ENT Problem field and select YES/NO, according to patient demographic information sheet.
- e. Using mouse, click on the arrow in the NFHs (noise free hours) field and enter the appropriate number of noise free hours.

NOTE: Steady Noise Exposure and Impulse Noise Exposure fields are left blank.

- f. Use Tab key to enter HPD (hearing protection devices) used field and select YES/NO.
- g. At the Hearing Protection Used window select the HPD used.
- h. If a list appears in the box, select specific HPD used and size as appropriate to patient.
- i. Select Double Protection, YES/NO.
- j. Click OK to close the pop up window.
- k. Using mouse, click on the arrow in the Glasses/Goggles Worn field. Select appropriate entry. Press Tab key after entry.

6. Repeat steps 4b through 4e and 5a through 5k for all stations in use.

7. On the DOEHRS-HC menu bar select File, select Transfer to Audiometer, All Stations.

8. Complete testing.

- a. Click the CCA-200 window at the bottom of the screen.
- b. When all test stations display the message "keep busy", click Test, Stop on the CCA-200 menu bar.
- c. Click the DOEHRS-HC window at the bottom of the screen.
- d. On the DOEHRS-HC menu bar click File, Retrieve from Audiometer, All Stations.
 - (1) If performing a DD Form 2216 an OSHA window may pop up. Click OK.
 - (2) Click YES if DD Form 2215 is present in patient's record.
 - (3) Click NO if DD Form 2215 is not present in patient's record.
- e. Referral prompts may appear after each test if warranted.

NOTE: A referral prompt will appear if a significant threshold shift (STS) is present or significant hearing loss in the case of a DD Form 2215.

- (1) Click OK at referral prompt.
- (2) If disposition/referral page appears, print and store per local SOP.
- f. At the HL (hearing loss) data saved window click OK.
- g. Click the Print Tests From All Booths icon at the bottom of the DOEHRS-HC window.
- h. On the DOEHRS-HC menu bar click File, Clear Test Results, Current or All Stations.
- i. On the CCA-200 menu bar click, Test, Clear.

9. Place a copy of printed testing in patient's medical record.

10. Counsel patient on test results and take appropriate action.

- a. Review test results with patient.
 - (1) Point out today's test results.
 - (2) Point out reference audiogram (if DD Form 2216 was performed).
- b. Determine if an STS or significant loss is present.

Performance Steps

(1) Point out difference between today's audiogram and reference.

(2) Note significant threshold shift (STS) box number.

NOTE: STS box will annotate if an STS has occurred.

(3) If STS is noted have patient sign in block #25, Remarks.

c. Refer patient for retest or referral IAW instructions with DOEHRS-HC.

Performance Measures

<u>GO</u>	<u>NO GO</u>
-----------	------------------

1. Selected correct demographic data.	_____	_____
2. Printed correct Hearing Conservation form DD Form 2215 or DD Form 2216.	_____	_____
3. Made referrals as appropriate.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References**Required**

None

Related

DA PAM 40-501

FIT PREFORMED EARPLUGS**081-830-2003**

Conditions: You have a patient to be fitted with earplugs. You will need a selection of DA approved preformed triple and single flange earplugs, DA approved earplug carrying cases, an otoscope with speculum, and a locally approved record keeping system.

Standards: Selected and issued the appropriate style and size of earplugs for each ear.
Trained the recipient on how to insert earplugs.

Performance Steps

1. Prepare for fitting of preformed earplugs.
 - a. Gather equipment.
 - b. Explain earplug fitting procedure to recipient.
2. Perform otoscopic exam of tympanic membrane (TM) and external auditory canal (EAC) of each ear. If otoscopic exam reveals contraindication to fitting an earplug, make medical referral. Do not fit earplug until condition is resolved.

NOTE: Contraindications to fitting earplugs are cerumen impaction, irritated or swollen EAC, perforated TM, discolored TM, or active drainage.

3. Attempt to fit triple flange earplug in EAC.
 - a. Select the size earplug which closely matches the size of the EAC.
 - b. Remove lid of earplug carrying case, and place earplug in seating device on the lid of carrying case.
 - c. Pulling external ear up and back, attempt to insert earplug until largest flange is flush with opening of EAC.
 - d. If unable to fit outer flange flush with EAC, repeat steps 3a through 3c with a different size earplug.
4. If the stem of the triple flange earplug is bent by contact with the tragus, or the recipient states the triple flange earplug is uncomfortable, do not fit this ear with a triple flange earplug. Go to step 6 to fit a single flange earplug to the ear.

NOTE: This is done to avoid pressure points in the EAC and the tragus.

5. If the triple flange on the first ear is a good fit, go to step 7.
6. Attempt to fit single flange earplug in EAC.
 - a. Select the size earplug which closely matches the size of the EAC.
 - b. Pull external ear up and back.
 - c. Using the two-finger method, grasp earplug tab between thumb and forefinger and insert into ear canal with the tab positioned towards the bottom of the EAC.
 - d. Rotate until seated with tab toward back of the ear.
 - e. Use single flange seating device to ensure the seat.
 - f. If EAC is not occluded, select new size and go to step 6a.
7. Check fit.
 - a. Gently pull on the stem or tab of earplug to check for proper fit (make sure earplug does not fall out of ear). If tension is felt when pulling on the earplug, a good fit has been obtained. If earplug falls out of EAC, fit another size plug and repeat process.
 - b. Instruct recipient to count to three. Ask the recipient if the voice sounds muffled and if the earplug feels comfortable. If yes, a good fit has been obtained. Go to step 8.

Performance Steps

- c. If the voice does not sound muffled, the recipient states that the earplug is uncomfortable, or no tension is felt when pulling on the earplug, a good fit has not been obtained. Fit a different size or style earplug.

8. Go to step 3 and repeat the earplug fitting process for the opposite ear.

NOTE: Many recipients will have enough difference between ears to require different styles or sizes of earplugs between ears.

9. Train recipient to insert earplugs properly.

- a. Demonstrate proper insertion procedures.

(1) Using the opposite hand, reach behind head and gently pull ear up and back while inserting the earplug. For the triple flange plug, use the earplug insertion device in the lid of the earplug carrying case. For the single flange earplug, use the two-finger approach to insert the plug in the ear until the tab is to the rear. Use the single flange seating device that comes with the earplug carrying case to set the plug securely.

(2) Check the earplug insertion by counting until the voice sounds muffled. Check for tension by pulling stem slightly.

- b. Coach the recipient through inserting each earplug until able to do so without coaching.

10. Document fitting in accordance with local standing operating procedure (SOP).

Performance Measures

GO **NO**
GO

1. Prepared for fitting of preformed earplugs.

- a. Gathered equipment.

- b. Explained earplug fitting procedure to recipient.

2. Performed otoscopic exam of tympanic membrane (TM) and external auditory canal (EAC) of each ear. If otoscopic exam revealed contraindication to fitting an earplug, made medical referral. Did not fit earplug until condition was resolved.

NOTE: Contraindications to fitting earplugs are cerumen impaction, irritated or swollen EAC, perforated TM, discolored TM, or active drainage.

3. Fitted each ear with a triple or single flange earplug of appropriate size and comfort for that ear.

4. Trained recipient to insert earplugs properly.

- a. Demonstrated proper insertion procedures.

b. Using the opposite hand, reached behind head and gently pulled ear up and back while inserting the earplug. For the triple flange plug, used the earplug insertion device in the lid of the earplug carrying case. For the single flange earplug, used the two-finger approach to insert the plug in the ear until the tab is to the rear. Used the single flange seating device that comes with the earplug carrying case to set the plug securely.

- c. Checked the earplug insertion by counting until the voice sounds muffled. Checked for tension by pulling stem slightly.

Performance Measures**GO****NO
GO**

- d. Coached the recipient through inserting each earplug until able to do so without coaching.
5. Documented fitting in accordance with local standing operating procedure (SOP). ——— ———

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. For performance measure 3, it is important that the soldier attempted to fit an earplug to each ear, and did not fit one ear and assume the other ear would need the same style and size earplug. Have the soldier perform the task until it is done correctly.

References**Required**

None

Related

AR 40-501
 DA PAM 40-501
 DA POSTER 40-501B
 DA POSTER 40-501C
 DA POSTER 40-501D
 DA POSTER 40-501E
 DA POSTER 40-501G
 DA POSTER 40-501H
 DA POSTER 40-501M

PRODUCE A HEARING AID EARMOLD IMPRESSION

081-830-2006

Conditions: You have orders from an audiologist to produce a hearing aid mold for a patient. You will need an otoscope, speculum, ear mold impression material, mixing cup, spatula, an impression syringe, ear light, hand towels, non sterile 4x4s, otoblock, manufacturer's instructions, manufacturer's order form, manufacturer's mailing box, and a hearing aid order registry.

Standards: Produced an earmold impression suitable for the fabrication of a hearing aid for fitting.

Performance Steps

1. Prepare for ear mold impression.
 - a. Gather equipment and supplies.
 - b. Instruct the procedure to the patient.
 - (1) Tell patient what you are going to do.
 - (2) Tell patient what they will experience/feel.
 - (3) Tell patient what you want them to do.
2. Perform ear mold impression.
 - a. Perform an otoscopic examination of ear canal for contraindications for the procedure.

NOTE: If any of these conditions exist do not perform ear mold impression and refer patient to Ear, Nose, and Throat Clinic: otitis external, otitis media, redness, swelling, discolored tympanic membrane (TM), cerumen impaction, TM perforation.

- b. Place otoblock in ear canal.
- c. With one hand pull back and up on the ear.
- d. Using ear light and opposite hand gently push otoblock past the first bend of the ear canal.

NOTE: The attached string will protrude out of the ear canal. This act may induce coughing in the patient.

- e. Verify proper insertion of the otoblock by performing an otoscopic examination.
- f. Drape the patient's shoulder with a hand towel.
- g. Remove plunger from syringe.
- h. Mix ear mold impression material per manufacturer's instructions.

NOTE: Different ear mold impression materials set at different rates.

- i. Insert mixed ear mold impression material into syringe.
- j. Put plunger of syringe into syringe body and push impression material to tip of syringe.
- k. Inject mixed ear mold impression material into ear canal until ear canal and external ear are covered with impression material.

NOTE: Allow material to push syringe out of the ear canal and then smooth protruding impression material.

- l. Instruct patient to speak or move the lower jaw before impression material is allowed to harden.

NOTE: This will allow for a more natural fitting hearing aid.

- m. Allow ear mold impression material to set and harden per manufacturer's instructions.
- n. To remove impression pull back on external ear to reveal edge of ear mold.
- o. Grasp ear mold edge and rotate forward and pull out simultaneously.
- p. Completely remove ear mold and otoblock. Inspect for defects.

NOTE: Divots, cracks, air pockets, and deformities can cause an ill-fitting hearing aid.

Performance Steps

- q. Perform otoscopic exam on ear canal to look for remaining impression material.

NOTE: Any material left in ear should be removed by performing a cerumenectomy. (See task 081-830-2015.)

- r. Clean any impression material left on external ear with a 4x4.

3. Document procedure.

- a. Prepare manufacturer's order form per audiologist recommendations.
- b. Place ear mold and manufacturer's order form in manufacturer's mailing box.
- c. Annotate ear mold and patient in hearing aid order registry.
- d. Send ear mold to manufacturer.

Performance Measures**GO****NO
GO**

1. Instructed patient, covering the following three elements:

- a. What is going to be done.
- b. What they will experience/feel.
- c. What they will need to do.

2. Determined not to make the ear mold impression if contraindications were present during otoscopic exam.

NOTE: If any of these conditions exist do not perform ear mold impression and refer patient to Ear, Nose and Throat Clinic: otitis external, otitis media, redness, swelling, discolored tympanic membrane (TM), cerumen impaction, TM perforation.

3. Inserted otoblock past first turn of the external auditory canal (EAC).

4. Produced an ear mold impression free of defects.

NOTE: Divots, cracks, air pockets, and deformities can cause an ill-fitting hearing aid.

5. Performed an otoscopic exam to ensure no impression material was left in EAC or that any injuries occurred.

6. Documented procedure.

- a. Prepared manufacturer's order form per audiologist recommendations.
- b. Placed ear mold and manufacturer's order form in manufacturer's mailing box.
- c. Annotated ear mold and patient in hearing aid order registry.
- d. Sent ear mold to manufacturer.

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. On performance measure 4, one or two defects are permissible if the evaluator judges the defects will not result in an ill-fitting hearing aid. Have the soldier perform the task until it is done correctly.

References None

REPAIR MINOR HEARING AID DEFICIENCIES

081-830-2007

Conditions: You have a nonfunctioning hearing aid (HA), patient, and an onsite audiologist. You will need replacement parts (battery compartment doors, wind hood/screen, sound dampers, wax baskets), batteries, HA repair station with buffing and grinding components, ultra-violet (UV) patch material, contact solution, suction apparatus, HA brush, X-Acto knife, safety glasses, drill bit set, plastic cement, battery extraction tool, battery tester, wax loop screwdriver, cotton tipped applicator (CTA), cleaning solution, tweezers, foam block, clear tape, 3 cc syringe, clothes pin clamps, HA stethoscope, manufacturer repair paperwork, manufacturer repair box, otoscope, and local SOP for documentation.

Standards: Returned the hearing aid to functional use or forwarded to the manufacturer for more extensive repair.

Performance Steps

1. Interview patient regarding HA problem.
 - a. When did problem begin? Is problem constant or intermittent?
 - b. Did anything detrimental happen to HA, for example, was it dropped, stepped on, worn in shower, or dog chewed it?
 - c. Is the problem with the entire HA or is it a component such as the telephone switch, volume control (VC) cap, shell is cracked/broken, or battery door jammed?
 - d. Is the HA causing irritation in the ear?

NOTE: Hot spots.

- e. Is feedback the problem?

NOTE: Feedback is the whistling noise heard when amplified sound from the HA is received by the HA microphone.

2. Begin troubleshooting procedure.
 - a. Feedback, go to step 3.
 - b. Battery door broken/battery stuck, go to step 4.
 - c. Dead aid, go to step 5.
 - d. HA too loud, weak HA, or high battery drain, go to step 6.
 - e. HA falls out/rocks or phone switch, go to step 7
 - f. Volume control cap broken, go to step 8.
 - g. Wind noise, go to step 9.
 - h. Vent tube enlargement, go to step 10.
 - i. Shell cracked, go to step 11.
 - j. Receiver remount, go to step 12.
 - k. Wax basket replacement, go to step 13.
 - l. HA face off, go to step 14.
 - m. HA creating sore spots in ear, go to step 15.
 - n. Malfunctioning phone switch, go to step 17.
 - o. Return HA to manufacturer for repair, go to step 17.

3. Correct a HA feedback problem.

- a. Perform otoscopic exam.

NOTE: If patient has abnormal otoscopic exam, refer to primary care.

- b. If receiver tube is retracted into HA shell, go to step 12.

NOTE: A retracted receiver tube will cause internal feedback.

Performance Steps

- c. Add sound damper starting with largest size.
 - (1) Insert sound damper into exterior opening of vent tube.
 - (2) Using wax loop screwdriver, apply gentle pressure on sound damper.
 - (3) Push sound damper into vent tube until it is flush with vent tube edge.
 - (4) Listen to HA with HA stethoscope to see if it is working correctly.
 - (5) If feedback is corrected, go to step 16.
 - (6) If this does not correct the feedback problem, decrease damper size.
 - (7) Repeat steps 3c(1) through 3c(6) until damper occludes vent.
 - (8) If feedback is corrected, go to step 16.
- d. Receiver bell and canal length reduction.

NOTE: This procedure is done to correct a receiver tube opening on the canal wall.

- (1) Using X-Acto knife, trim receiver tube to desired depth.

NOTE: Desired depth is an estimation of length to remove to correct opening placement.

- (2) Place foam block in receiver tube and vent tube.

NOTE: Foam block prevents accumulation of debris in tubes.

- (3) Put on safety glasses.

- (4) Using the grinding station and a ball burr, make a bell in receiver tube.

NOTE: Bell edges should not extend past ends of HA.

- (5) Remove foam blocks and listen to HA with HA stethoscope to see if HA is working correctly.

- (6) If this corrects the feedback problem, go to step 16.

- (7) Hold HA up to room lights to determine where components are located in the HA.

NOTE: This is done to safeguard components during drilling.

- (8) Estimate the length of canal that needs to be removed.

- (9) Reinsert foam blocks before grinding.

- (10) Using the grinding station and a trimming burr, remove excess shell to your predetermined depth.

NOTE: Cut one side toward the receiver tube. Rotate HA and repeat on opposite side.

- (11) Ensure that receiver tube is still secured to shell of HA. If not, cement to shell and let dry.

NOTE: Do not use excessive glue as this could alter fit and cause patient discomfort. Receiver tube may be left longer if patient prefers.

- (12) Using an X-Acto knife, trim receiver tube to be flush with HA shell.

- (13) Remove foam blocks.

- (14) Listen to HA with HA stethoscope to see if it is working correctly.

- (15) If this corrects the feedback problem, go to step 16.

- e. HA remake.

NOTE: An improper fitting HA may cause feedback due to sound leakage around the HA.

- (1) Produce an ear mold impression. (See task 081-830-2006.)

- (2) Go to step 17.

4. Correct a stuck battery or broken door problem.

- a. Slide curved battery extraction tool behind the battery in battery compartment.

- b. Use gentle force to extract battery from the compartment.

- c. Remove battery door from hinge pin.

- (1) Swing battery door open to the stopping point.

- (2) Grasp battery door between finger and thumb.

- (3) Push battery door toward microphone until it pops off the hinge pin.

NOTE: If hinge pin is pulled from casing, HA must be sent to manufacturer for repair.

- (4) Select replacement door for HA.

Performance Steps

NOTE: Many factors determine a replacement door - color of HA, left or right HA, HA type, and microphone cover. Compare replacement door with original.

- (5) Align slot in battery door with hinge pin in HA.
- (6) Press firmly and evenly on door toward hinge pin until it snaps into place.
- (7) If battery contacts impede closing of battery door, depress contacts slightly with wax loop screwdriver.
- (8) Replace battery in battery door and close.
- (9) Listen to HA with HA stethoscope to see if it is working correctly.
- (10) Go to step 16.

5. Repair dead aid problem.

a. Dead or weak battery.

- (1) Use a battery tester to ensure that battery has an adequate charge.

NOTE: Battery tester should have a range for good and bad.

- (2) If battery is weak or dead, replace battery.
- (3) Listen to HA with HA stethoscope to see if it is working correctly.

NOTE: Listen for HA to amplify sound.

- (4) If this corrects the HA problem, go to step 16.

b. Battery contacts, battery compartment, or battery door.

- (1) Remove battery door and inspect battery contacts in shell of HA.

NOTE: Corrosion can hinder a good contact with battery.

- (2) Using CTA with contact cleaner, buff contacts free of any debris or corrosion.
- (3) Using a wax loop screwdriver, elevate contacts slightly to ensure good contact with battery.
- (4) Inspect battery compartment to ensure that component wires are not in compartment.
- (5) Using small screwdriver, push any questionable wires into HA shell away from battery compartment.
- (6) Inspect battery door and ensure that the door is correct for this HA.

NOTE: Some battery doors incorporate a microphone cover.

- (7) If door is incorrect, replace with correct door. (See step 4.)
- (8) Listen to HA with HA stethoscope to see if it is working correctly.

NOTE: Listen for HA to amplify sound.

- (9) If this corrected the dead HA, go to step 16.

c. Occluded vent tube, receiver tube, or microphone.

- (1) Inspect vent tube, receiver tube, and microphone for debris.
- (2) Using hearing aid brush and suction apparatus, remove any cerumen or dirt that has accumulated in the parts.
- (3) Listen to HA with HA stethoscope to see if it is working correctly.

NOTE: Listen for HA to amplify sound.

- (4) If this did not correct the problem, go to step 17.
- (5) If this corrected dead aid, go to step 16.

6. Repair too loud, weak, or high battery drain HA.

- a. Consult with the audiologist to determine he cannot adjust HA.
- b. Go to step 17.

7. Repair a HA that is loose or falls out of ear (canal or helix lock).

- a. Inspect ear for presence of anti-tragus or defined helix area.

NOTE: For a canal or helix lock to be effective, the ear must have one of these criteria.

- b. Perform ear mold of ear. (See task 081-830-2006.)

Performance Steps

c. Go to step 17.

8. Replace broken volume control (VC) cap.

a. Remove damaged VC cap.

b. Replace VC cap.

(1) One wheel replacement.

(a) Locate tabs on the inside of the VC cap.

(b) Align the tab with the slot on the volume control.

(c) Snap VC cap into place.

NOTE: Do not use any plastic cement on volume control.

(d) If unable to replace VC cap, go to step 17.

(e) Listen to HA with HA stethoscope to see if it is working correctly.

NOTE: Listen to HA. Turn volume control and listen for change in sound volume. Listen to HA for nonamplification of sound, buzzing, crackling, squealing, or any noise that would affect sound reception.

(f) Go to step 16.

(2) Two wheel replacement.

NOTE: This is done using two VC caps that are stackable (for patients with dexterity problems).

(a) Install the 1st VC cap as described in step 8b(1).

(b) Apply 1-2 drops of plastic cement to underside of 2nd VC cap. Do not apply so much that it adheres the VC cap to volume control.

(c) Align the five grooves in the VC cap with the five notches on the top of the 1st VC cap.

(d) Place 2nd VC cap onto 1st.

(e) Allow plastic cement to dry.

(f) Check HA with HA stethoscope. Turn volume control and listen for change of volume, nonamplification of sound, buzzing, cracking, squeaking, or any noise that would affect sound reception.

(g) Go to step 16.

9. Install wind hood/windscreen.

a. Using a CTA and cleaning solution, thoroughly clean area around microphone.

b. Using an X-Acto knife blade, spread a drop of plastic cement on a flat surface.

c. Using tweezers, grasp wind hood/windscreen and dip base in plastic cement.

NOTE: Remove excess cement.

d. Place wind hood/windscreen over microphone opening with wind hood opening to the rear of the HA.

e. Hold in place with pressure to allow wind hood/windscreen to bond to faceplate.

f. Allow 5 minutes for plastic cement to dry.

g. Listen to HA with stethoscope to see if it is working correctly.

NOTE: Listen for amplification of sound and that the wind does not cause a rushing noise.

h. If this doesn't correct the problem, refer to audiologist.

i. Go to step 16.

10. Enlarge vent tube.

a. Place foam block in receiver tube and clear tape over microphone.

NOTE: Foam block is placed here to protect components from becoming filled with debris.

b. Put on safety glasses.

c. Using grinding station and trimming burr, trim away excess shell material from tip of HA.

NOTE: Do not trim off bump on HA corresponding to anti-tragus notch. This would loosen fit.

Performance Steps

- d. Using grinding station and ball burr, gradually increase the diameter of the vent tube focusing on the outer shell as opposed to the inner shell.
- e. Using the grinding station and trimming burr, remove all rough and sharp edges of vent tube.
- f. Buff entire HA with buffing wheel on grinding station.
- g. Remove foam block and tape from microphone.
- h. Use stethoscope to listen for HA to amplify sound.
- i. If problem is not corrected, refer to audiologist.
- j. Go to step 16.

11. Repair cracked shell.

- a. Place foam block in receiver tube and clear tape over the microphone.
- b. Put on safety glasses.
- c. Using the grinding station and a ball burr, grind out crack(s).

NOTE: Holes through shell's outer surface need to be beveled outward to aid in adhesion.

- d. Using the grinding station and sanding drum, rough up surface around the ground out areas.
- e. Use a CTA and cleaning solution to clean ground out areas.
- f. Using syringe, inject UV patch material to fill all voids. Material should form a dome shape over crack or hole.
- g. Allow mixture to set per manufacturer's instructions in UV curing box.
- h. Using grinding station and sanding drum, sand surface smooth to contour of shell.
- i. Remove foam block and tape from microphone.
- j. Buff entire HA with buffing wheel on grinding station.
- k. Use stethoscope to listen for HA to amplify sound.
- l. If this corrected the problem, go to step 16.
- m. If unable to correct problem, make ear mold and go to step 17. (See task 081-830-2006.)

12. Correct a detached receiver tube.

- a. Put on safety glasses.
- b. Using grinding station and ball burr with slightly larger diameter than sound bore.
- c. Using grinding station and a saw bit, make a groove around the interior of the sound bore.

NOTE: This is done to secure the receiver tube to the sound bore.

- d. Using tweezers, grasp the receiver tube and pull it through the sound bore.
- e. Apply plastic cement completely around the receiver tube inside the sound bore.

NOTE: Ensure that the groove in the sound bore is completely filled.

- f. Wipe excess plastic cement from exterior HA shell.
- g. Allow 20-30 minutes for plastic cement to dry.
- h. Suction out any debris that has fallen into the receiver with suction apparatus.
- i. Listen to HA with stethoscope to see if it is working correctly.

NOTE: Listen to HA for nonamplification of sound, buzzing, crackling, squealing, or any noise that would affect sound reception.

- j. If HA is malfunctioning, go to step 2.
- k. Go to step 16.

13. Perform wax basket replacement.

NOTE: The wax basket prevents cerumen from entering the receiver tube.

- a. Insert tweezers into receiver tube and grasp wax basket.
- b. Gently extract the wax basket from the receiver tube and discard in trash.

Performance Steps

- c. Using a wax loop screwdriver, clean any cerumen remaining in receiver tube.
- d. Place new wax basket into receiver tube.
- e. Using a wax loop screwdriver, apply gentle pressure to insert wax basket completely into receiver tube.
- f. Use stethoscope to listen for HA to amplify sound.
- g. If still malfunctioning, go to step 2.
- h. Go to step 16.

14. Reattach face of HA.

- a. Look at HA for any broken wires or damaged components. If present, go to step 17.
- b. Put on safety glasses.
- c. Using grinding station and sanding drum, rough up interior edges of faceplate and shell.
- d. Using CTA and cleaning solution, clean roughed edges.
- e. Pull receiver tube through sound bore.
- f. Position receiver wires between faceplate and shell.
- g. Using a syringe filled with plastic cement, apply thin coat to edges of shell.
- h. Place faceplate on shell.
- i. Apply clothes pin clamp and allow to dry for 10-15 minutes.
- j. Reattach the receiver tube (see step 12).

15. Remove source of sore spots in ear caused by HA.

- a. Perform otoscopic exam of ear.
- b. Identify red and irritated area in canal.
- c. Locate and mark (with marker) areas of HA that correspond with the irritation in ear.
- d. Put on safety glasses.
- e. Using grinding station and trimming burr, remove shell material on HA corresponding to sore spots in ear.
- f. Have patient put HA in and determine comfort level.

NOTE: This may have to be repeated several times to achieve patient's comfort level.

- g. Buff any sharp edges smooth with buffing wheel on grinding station.
- h. Counsel patient to return to the health clinic if soreness or irritation persists.
- i. Go to step 16.

16. Return HA to patient.

NOTE: If HA is not under manufacturer warranty, refer to audiologist.

- a. Have patient put HA in ear.
- b. Have patient determine that problem is corrected.
- c. If problem persists, go back to step 2.
- d. Document patient's records per local SOP.

17. Return HA to manufacturer for repair if it cannot be repaired on-site.

- a. Record HA in manufacturer repair register.
- b. Annotate potentiometer settings in manufacturer repair register.
- c. Fill out manufacturer repair paperwork.
- d. Place damaged HA and mold in manufacturers repair box and ship to manufacturer.
- e. After receiving HA back from manufacturer, verify potentiometer settings and listen to HA with stethoscope.
- f. If the problem has been corrected, make appointment with patient for return visit.

Performance Measures	<u>GO</u>	<u>NO GO</u>
1. Interviewed patient regarding HA problems.	_____	_____
2. Began troubleshooting procedure.	_____	_____
3. Returned HA to patient or referred to audiologist.	_____	_____
4. Corrected feedback problem.	_____	_____
5. Corrected a stuck battery or broken door.	_____	_____
6. Repaired a dead aid problem.	_____	_____
7. Repaired too loud, weak, or high battery drain HA.	_____	_____
8. Repaired a HA that is loose or falls out of ear.	_____	_____
9. Replaced broken volume control cap.	_____	_____
10. Installed a wind hood/windscreen.	_____	_____
11. Enlarged a vent tube.	_____	_____
12. Repaired a cracked shell.	_____	_____
13. Corrected a detached receiver.	_____	_____
14. Performed wax basket replacement.	_____	_____
15. Reattached faceplate of HA.	_____	_____
16. Removed source of sore spots in ear caused by HA.	_____	_____
17. Returned HA to patient or repeated troubleshooting procedures.	_____	_____
18. Returned to manufacturer for repair.	_____	_____

Evaluation Guidance: All performance measures will not be used in every situation. Score the soldier GO if all used performance measures are passed. Score the soldier NO GO if any used performance measure is failed. If the soldier fails any performance measure, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

Subject Area 2: ENT Clinic

PERFORM ANTERIOR PACKING**081-830-2012**

Conditions: You have physician's orders and a patient requiring anterior packing. You will need an exam chair, Vienna nasal speculum, bayonet forceps, 1/2 inch Vaseline impregnated gauze, exam/treatment unit, Afrin, light source, head mirror, 2x2 gauze, paper tape, lubricating drops, frazier suction tip, and hand towels.

Standards: Set up and performed anterior packing without contaminating supplies or causing further injury to patient.

Performance Steps

1. Prepare for anterior packing.
 - a. Assemble equipment and supplies.
 - b. Seat patient in exam chair and explain procedure.
 - c. Drape patient with hand towels.

NOTE: Drape so that a "V" is formed with the towels in the front of the patient.

2. Perform anterior packing.
 - a. Using Vienna nasal speculum, head mirror, and light source, inspect nasal cavity and apply Afrin spray to affected/bleeding area. This constricts vessels in the nose.

NOTE: Intermittent suction may be applied with frazier suction tip to better visualize affected area.

- b. Using bayonet forceps, apply 1/2 inch Vaseline gauze in a layered fashion.

NOTE: Layering one section over the previous section of Vaseline gauze will minimize trauma when removed.

- c. Continue procedure until bleeding stops or unable to insert more gauze.
 - d. Tape 2x2 gauze under patient's nose to absorb drainage.
 - e. Explain precautions to the patient.
 - (1) No manipulation or nose blowing.
 - (2) Open mouth to sneeze or cough.
 - (3) No strenuous activity for 1 week.
 - (4) Elevate head of bed to comfortable level for 1 week.
 - (5) No hot food or drink, smoking, aspirin, or alcohol for 1 week.
 - (6) Use lubricating drops TID for 1 week as prescribed by doctor.
 - (7) Expect a headache.
 - f. Schedule the patient to return to clinic in 2 to 3 days to have gauze removed.

3. Document procedure per local SOP.

Performance Measures**GO****NO
GO**

1. Prepared for anterior packing.
 - a. Assembled equipment and supplies.
 - b. Seated patient in exam chair and explained procedure.
 - c. Draped patient with hand towels.

NOTE: Draped so that a V was formed with the towels in the front of the

Performance Measures

<u>GO</u>	<u>NO</u>
	<u>GO</u>

patient.

2. Performed anterior packing.

- a. Using Vienna nasal speculum, head mirror, and light source, inspected nasal cavity and applied Afrin spray to affected/bleeding area.

NOTE: Intermittent suction was applied with frazier suction tip to better visualize affected area if needed.

- b. Using bayonet forceps, applied 1/2 inch Vaseline gauze in a layered fashion.*
- c. Continued procedure until bleeding stopped or unable to insert more gauze.
- d. Taped 2x2 gauze under patient's nose to absorb drainage.
- e. Explained precautions to the patient.
 - (1) No manipulation or nose blowing.
 - (2) Open mouth to sneeze or cough.
 - (3) No strenuous activity for 1 week.
 - (4) Elevate head of bed to comfortable level for 1 week.
 - (5) No hot food or drink, smoking, aspirin, or alcohol for 1 week.
 - (6) Use lubricating drops TID for 1 week as prescribed by doctor.
 - (7) Expect a headache.
- f. Scheduled an appointment for patient return to clinic in 2 to 3 days to have gauze removed.

3. Documented procedure per local SOP.

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures, including the critical substeps (denoted by an *) to be scored GO. If the soldier fails any step or critical substep, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

PERFORM CERUMENECTOMY

081-830-2015

Conditions: You have a patient with cerumen impaction. You will need an exam treatment unit, wire loop, alligator forceps, Baron size 3, 5, 7 or Rosen size 15-20 suction tips, suctioning source, operating microscope, speculum, examination chair, Debrox, nonsterile gloves, 4x4 pads, and patient drape/towel.

Standards: Removed all debris so that visual inspection of the external auditory canal (EAC) confirmed ear was free of cerumen. Did not cause further injury to patient.

Performance Steps

1. Explain procedure to the patient.
2. Position the patient
 - a. Place in the reclined position in the exam chair.
 - b. Rotate head so the affected ear is upright and easily accessible to the operating microscope.
 - c. Straighten the external auditory canal by pulling the auricle of the affected ear up and back.
3. Prepare the required equipment.
 - a. Don nonsterile gloves.
 - b. Place the speculum in the ear.
 - c. Position microscope to view through speculum.
 - d. Focus the microscope on the speculum.
4. Remove debris from EAC.
 - a. Apply the cerumen (wax) softener through the speculum to the impacted material.
NOTE: Wait approximately 5 minutes.
 - CAUTION:** Patient may move unexpectedly. Always use one extended finger as a brace placed against his or her head to prevent trauma to the EAC or TM
 - b. Apply suction to the impaction, using the appropriate size suction tip.
 - c. Use the wire loop to assist when necessary.
 - (1) Slide the wire loop along the edge of the ear canal in an effort to get behind the impaction.
 - (2) Use gentle tension to remove cerumen, then wipe instrument off on a 4x4.
 - d. Use the alligator forceps to assist when necessary.
CAUTION: Avoid the edges of the ear canal as the alligator forceps have sharp points that could damage the canal.
 - (1) Grasp cerumen debris with alligator forceps.
 - (2) Apply gentle tension to remove debris.
 - e. Use 4x4 to clean the cerumen from the alligator forceps and wire loop.
 - f. Observe patient for signs of dizziness. If patient is feeling dizzy, keep him/her seated until dizziness subsides.
 - g. Repeat steps 4a through 4d until all debris is removed from EAC.
5. Instruct the patient
 - a. Patient may experience itching for 2-3 days. If it persists beyond 7 days, see primary care physician.
 - b. If the patient has pain or drainage, see primary care physician.

Performance Steps

6. Document procedure per local SOP.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Explained the procedure to the patient.	_____	_____
2. Positioned the patient.	_____	_____
3. Prepared the required equipment.	_____	_____
4. Removed debris from the EAC.	_____	_____
5. Instructed patient to see primary care physician if itching persists longer than 7 days or pain/discharge is noted at any time.	_____	_____
6. Documented the procedure per local SOP.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

PERFORM EAR IRRIGATION IN AN ENT CLINIC
081-830-2017

Conditions: You have a patient with cerumen impaction. You will need an exam/treatment unit, otoscope, speculum, wax softener, acetic acid/alcohol, supply of 4x4s, exam chair, towel, hydrogen peroxide, irrigation bottle, ear basin, and warm water.

Standards: Irrigated ear until solution returned clear and visual inspection confirmed that ear was free of cerumen.

Performance Steps

1. Prepare for irrigation.
 - a. Gather equipment.
 - b. Explain procedure to patient.
 - c. Using an otoscope, examine tympanic membrane for disqualifiers for irrigation.

NOTE: If the tympanic membrane is bulging outward, has a perforation, or is blue, yellow, amber or red in color, do not perform irrigation and direct patient to see a physician.

- d. Prepare irrigation solution.
 - (1) Fill 1/2 of irrigation bottle with warm tap water.
 - (2) Fill remainder of bottle with hydrogen peroxide.

NOTE: Water should be approximately body temperature to prevent nystagmus.

- e. Drape patient with towel and have patient hold ear basin under ear with opposite hand.
2. Irrigate ear.
 - a. Connect air hose from exam/treatment unit to irrigation bottle.
 - b. Straighten ear canal by pulling up and back on external ear.
 - c. Familiarize patient with irrigation solution at low pressure on external ear.
 - d. Place tip of irrigation bottle just inside opening of ear with tip directed to roof of ear canal.
 - e. Direct slow steady stream of irrigation solution against the roof of ear canal.
 - f. Repeat irrigation until solution returns free of cerumen and debris.
 - g. Remove ear basin and dry external ear with 4x4.
 - h. Perform otoscopic exam to view ear canal to ensure it is free of debris.
 - i. Repeat process with opposite ear.
3. Remove excess solution from ear.
 - a. Instill drying agent (acetic acid or alcohol) in the ear.
 - b. Cover ear with 4x4 and have patient tilt head toward irrigated ear to allow remaining solution to drain.

NOTE: Patient may be dizzy and have drainage after procedure. Caution the patient for signs of external otitis.

4. Document procedure per local SOP.

Performance Measures

<u>GO</u>	<u>NO</u>
<u>GO</u>	<u>GO</u>

- | | | |
|--|-------|-------|
| 1. Prepared for irrigation. | _____ | _____ |
| a. Gathered equipment. | | |
| b. Explained procedure to patient. | | |
| c. Using an otoscope, examined tympanic membrane for disqualifiers for irrigation. | | |
| d. Prepared irrigation solution. | | |
| (1) Filled 1/2 of irrigation bottle with warm tap water. | | |
| (2) Filled remainder of bottle with hydrogen peroxide. | | |
| e. Draped patient with towel and had patient hold ear basin under ear with opposite hand. | | |
| 2. Irrigated ear. | _____ | _____ |
| a. Connected air hose from exam/treatment unit to irrigation bottle. | | |
| b. Straightened ear canal by pulling up and back on external ear. | | |
| c. Familiarized patient with irrigation solution at low pressure on external ear. | | |
| d. Placed tip of irrigation bottle just inside opening of ear with tip directed to roof of ear canal. | | |
| e. Directed slow steady stream of irrigation solution against the roof of ear canal. | | |
| f. Repeated irrigation until solution returned free of cerumen and debris. | | |
| g. Removed ear basin and dried external ear with 4x4. | | |
| h. Performed otoscopic exam to view ear canal to ensure it is free of debris. | | |
| i. Repeated process with opposite ear. | | |
| 3. Removed excess solution from ear. | _____ | _____ |
| a. Instilled drying agent (acetic acid or alcohol) in the ear. | | |
| b. Covered ear with 4x4 and had patient tilt head toward irrigated ear to allow remaining solution to drain. | | |
| 4. Documented per local SOP. | _____ | _____ |

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

PERFORM KOBRAK CALORIC TEST

081-830-2018

Conditions: You have a patient requiring a Kobrak Caloric test and a physician's orders. You will need an exam chair, Frenzel glasses, otoscope, supply of hand towels, 3 cc syringe, Rosen suction tip, ice, cold tap water, emesis basin, solution bowl, alcohol, 2% acetic acid, and stopwatches.

Standards: Induced nystagmus and recorded findings.

Performance Steps

1. Prepare for Kobrak Caloric test.
 - a. Gather equipment close enough to patient for easy access.
 - b. Seat patient in exam chair and explain procedure.
 - c. Perform otoscopic exam looking for disqualifiers for procedure.

NOTE: If any of the disqualifiers are present, do not perform test.

- (1) Discolored tympanic membrane.
 - (2) Tympanic membrane perforation.
 - (3) Bulging tympanic membrane.
- d. Drape patient's shoulders with hand towels.
- e. Place Frenzel glasses on patient.
- f. Position patient.
 - (1) Sitting - head tilted with nontest ear toward shoulder and test ear up.
 - (2) Reclining - turn head so test ear is up.
- g. Prepare test solution.
 - (1) Place ice into solution bowl.
 - (2) Pour tap water into solution bowl with ice.
 - (3) Draw solution into 3 cc syringe from solution bowl.
 - (4) Attach Rosen suction tip to syringe.
- h. Have patient hold emesis basin under test ear with opposite hand.

2. Perform Kobrak Caloric test.
 - a. Observe patient's eyes to determine if nystagmus is present.
 - (1) If nystagmus is not present, go to step 2b.
 - (2) If nystagmus is present, stop procedure and document as spontaneous nystagmus. Go to step 3.
 - b. Inject cold water solution into ear until full and start stopwatch #1.
 - c. Observe eyes for nystagmus.

NOTE: Observe eyes for at least 5 minutes.

- (1) If nystagmus is present, go to step 2d.
 - (2) If nystagmus does not occur, add more cold water and continue observation for an additional 10 minutes.
 - (3) If nystagmus occurs, go to step 2d.
 - (4) If nystagmus does not occur, go to step 2e.

NOTE: If unable to induce nystagmus in either ear, go to step 4.

- d. Measure onset time and duration time.
 - (1) Stop stopwatch #1 and start stopwatch #2. Record time from stopwatch #1 as onset time.
 - (2) Observe eyes until nystagmus stops and then stop stopwatch #2 and record time from stopwatch #2 as duration time.

Performance Steps

- e. Wait 10 minutes and repeat procedure in opposite ear.
 - f. Apply drying agent (2% acetic acid or alcohol) to both ears.
3. Document procedure per local SOP.

Performance Measures

GO

NO
GO

1. Prepared for Kobrak Caloric test.
 - a. Gathered equipment close enough to patient for easy access.
 - b. Seated patient in exam chair and explained procedure.
 - c. Performed otoscopic exam looking for disqualifiers for procedure.
 - (1) Discolored tympanic membrane.
 - (2) Tympanic membrane perforation.
 - (3) Bulging tympanic membrane.
 - d. Draped patient's shoulders with hand towels.
 - e. Placed Frenzel glasses on patient.
 - f. Positioned patient.
 - (1) Sitting - head tilted toward shoulder with test ear up.
 - (2) Reclining - turned head so test ear is up.
 - g. Prepared test solution.
 - (1) Placed ice into solution bowl.
 - (2) Poured tap water into solution bowl with ice.
 - (3) Drew solution into 3 cc syringe from solution bowl.
 - (4) Attached rosen suction tip to syringe.
 - h. Had patient hold emesis basin under test ear with opposite hand.
2. Performed Kobrak Caloric test.
 - a. Observed patient's eyes to determine if nystagmus is present.
 - (1) If nystagmus was not present, continued with step 2b.
 - (2) If nystagmus was present, stopped procedure and documented as spontaneous nystagmus. Continued with step 3.
 - b. Injected cold water solution into ear until full and started stopwatch #1.
 - c. Observed eyes for nystagmus.
 - (1) If nystagmus was present, continued with step 2d.
 - (2) If nystagmus did not occur, added more cold water and continued observation for an additional 10 minutes.
 - (3) If nystagmus occurred, continued with step 2d.
 - (4) If nystagmus did not occur, continued with step 2e.
 - d. Measured onset time and duration time.
 - (1) Stopped stopwatch #1 and started stopwatch #2. Recorded time from stopwatch #1 as onset time.
 - (2) Observed eyes until nystagmus stopped and then stopped stopwatch #2 and recorded time from stopwatch #2 as duration time.
 - e. Waited 10 minutes and repeated procedure in opposite ear.
 - f. Applied drying agent (2% acetic acid or alcohol) to both ears.
3. Documented procedure per local SOP.

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

APPLY MASTOID DRESSING

081-830-2021

Conditions: You have a patient with a postoperative mastoidectomy and physician's orders for a dressing. You will need an exam chair, kerlex wrap, sterile fluffs (4x4), sterile bandage scissors, tape, sterile gloves, umbilical tape, sterile towels, and Mayo stand.

Standards: Completed dressing without contaminating surgical site.

Performance Steps

1. Gather supplies and equipment.
2. Seat patient in exam chair and explain procedure.
3. Establish a sterile field.
 - a. Open sterile towels on Mayo stand.
 - b. Open supplies and place on sterile field.
 - c. Put on sterile gloves.
 - d. Unfold nine fluffs.
4. Apply dressing to mastoid.
 - a. Cut unfolded fluff with crescent shape to fit the contour of the ear and place behind ear over incision site (position of function).
 - b. Place two strips of umbilical tape across the head and forehead (draped over face above each eyebrow).
 - c. Place remaining fluffs around ear.

NOTE: Fluffs should form a bowl and cover ear and incision site.

CAUTION: Do not touch incision site.

- d. Wrap kerlex around head completely covering fluffs and incision site. Use entire roll.

NOTE: Kerlex should be snug but not tight. All fluffs must be covered by kerlex. Opposite ear should not be covered or bound.

- e. Tape ends of kerlex with adhesive tape.
- f. Tie each piece of umbilical tape across the kerlex into a double knot and cut off excess.

NOTE: Dressing should not obscure vision. Dressing should be neat, secure, and comfortable.

5. Counsel patient.
 - a. Do not get bandage wet.
 - b. If patient experiences a headache, return to clinic.
 - c. If the bandage is saturated with blood, report to the emergency room.
6. Document procedure per local SOP.

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

- | | | |
|---|-------|-------|
| 1. Prepared for mastoid dressing application. | _____ | _____ |
| 2. Applied mastoid dressing. | _____ | _____ |
| 3. Counseled patient. | _____ | _____ |
| 4. Documented procedure per local SOP. | _____ | _____ |

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

PERFORM FOREIGN BODY REMOVAL FROM EAR

081-830-2030

Conditions: You have a patient who requires that a foreign body be removed from his or her ear. You will need an exam treatment unit, Baron 3, 5, 7 or Rosin 15-20 suction tips, alligator forceps, billeau wire loop, rosen pick, Gruber ear speculum, operating microscope, mineral oil, and exam chair.

Standards: Removed the foreign body without injuring the patient and recorded IAW local SOP.

Performance Steps

1. Explain the procedure to the patient.
2. Position the patient.
 - a. Place in the reclined position in the exam chair.
 - b. Rotate head so the affected ear is upright and easily accessible to the operating microscope.
 - c. Straighten the external auditory canal by pulling the auricle of the affected ear up and back.
3. Select the appropriate size of speculum.
 - a. Observe the diameter of the patient's external auditory canal opening and select the speculum with a slightly smaller diameter opening.
 - b. Position the speculum in the external auditory canal to allow observation.
 - c. Focus the operating microscope by adjusting the distance of the microscope from the speculum.
4. Observe the external auditory canal and determine the size and type of foreign body.

CAUTION: A patient suspected of having a tympanic membrane perforation must be referred to an ENT doctor.

5. Remove the foreign body.
 - a. Remove peas, beans, or porous materials with a wire loop curette, small alligator forceps, or cupped forceps and suction.
 - b. Remove most foreign bodies using a locally prescribed irrigation solution and combination of instruments and suction.

CAUTION: If a nonporous foreign body located next to the tympanic membrane cannot be removed by irrigation and suction, discontinue the procedure and have an ENT doctor remove it.

- c. Remove odd shaped foreign bodies with small alligator forceps and suction.
6. Observe for signs of dizziness. If the patient is feeling dizzy, keep him or her seated until dizziness subsides.
7. Clean the treatment room IAW task 081-830-2009.
8. Instruct the patient.
 - a. Patient may experience itching for 2-3 days. If it persists beyond 7 days, see primary care physician.
 - b. If the patient has pain or drainage, see primary care physician.
9. Record the procedure in the patient's medical record.

Performance Steps

- a. Describe the foreign body that was removed.
- b. Describe the postprocedural condition of the ear canal and TM.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Explained the procedure to the patient.	_____	_____
2. Positioned the patient.	_____	_____
3. Selected the appropriate size of speculum.	_____	_____
4. Observed patient's external auditory canal and determined size and type of foreign body.	_____	_____
5. Removed foreign body.	_____	_____
6. Observed the patient for signs of dizziness.	_____	_____
7. Cleaned the treatment room.	_____	_____
8. Instructed the patient.	_____	_____
9. Recorded the procedure in the patient's medical record.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

REMOVE NASAL FOREIGN BODY

081-830-2034

Conditions: You have a patient with a foreign body in his or her nose and a physician's orders to remove it. You will need an exam chair, exam treatment unit, head light, Mayo stand, sterile hand towels, exam gloves, 4x4 gauze, mask with eye protection, ear loop, Vienna nasal speculum, Frazier suction tip #8, bayonette forceps, alligator forceps, Day ear hook, Afrin spray, and lidocaine topical anesthetic.

Standards: Removed foreign body without causing further injury, or referred the patient back to an ENT physician if a more invasive procedure was required.

Performance Steps

1. Gather and set up equipment.
 - a. Drape Mayo stand and lay out instruments.
 - b. Attach Frazier suction tip to suction apparatus.
2. Explain the procedure to patient.
3. Don personal mask, gloves, and headlight.
4. Position patient in the exam chair and drape.
 - a. Seat upright in the sniffing position.
 - b. Tilt head back slightly and adjust the head rest for support.
 - c. Drape with sterile towels.
5. Suction secretions from nasal cavity.
 - a. Open nasal cavity with Vienna nasal speculum.
 - b. Apply suction.
6. Visualize foreign body using headlight and Vienna nasal speculum.

NOTE: If you cannot see the object, refer the patient back to the ENT physician.
7. Alert the patient that he or she may feel some discomfort and should try not to move.
8. Remove the object using the instrument of choice.

CAUTION: If object is not easily dislodged and is causing additional injury, e.g., bleeding, tearing of mucosa, discontinue the procedure and refer the patient to the ENT physician.
9. Visualize nasal cavity for bleeding or other trauma.
 - a. If bleeding, have the patient pinch his or her nose for 2 minutes.
 - b. If uncontrolled by manual pressure, pack nose IAW task 081-830-2012.
10. Monitor patient for 5 to 10 minutes for adverse reactions such as fainting, nausea, or vomiting.

NOTE: If reactions are present, have the patient remain seated and monitor until reactions subside.
11. Counsel patient.
 - a. To return to primary care physician if bleeding reoccurs.
 - b. Not blow his or her nose.
 - c. Not to pick his or her nose.
 - d. That discharge, swelling, headache, or congestion may occur.

Performance Steps

- e. To return to clinic after 3 days if nasal passage is packed.
- 12. Send patient back to referring physician or primary care physician.
- 13. Document per local SOP.
- 14. Clean up exam room IAW task 081-830-2009.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Gathered and set up equipment.	_____	_____
2. Explained the procedure to the patient.	_____	_____
3. Donned mask, gloves, and headlight.	_____	_____
4. Positioned patient in exam chair and draped.	_____	_____
5. Suctioned secretions from nasal cavity.	_____	_____
6. Visualized foreign body using headlight and Vienna nasal speculum.	_____	_____
7. Alerted the patient that he or she may feel some discomfort and should try not to move.	_____	_____
8. Removed the object.	_____	_____
9. Visualized the nasal cavity for bleeding or other trauma.	_____	_____
10. Monitored patient for 5 to 10 minutes for adverse reactions.	_____	_____
11. Counseled patient.	_____	_____
12. Sent patient back to the referring or primary care physician.	_____	_____
13. Documented per local SOP.	_____	_____
14. Cleaned up exam room.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References

Required
None

Related
DEWEESE & SAUNDERS

PERFORM SUTURES/STAPLES REMOVAL**081-830-2026**

Conditions: You have a patient requiring suture/staple removal and physician's orders. You will need a suture removal kit, staple remover, 4x4s, a patient drape, antiseptic cleaning solution, adhesive strips, cotton tipped applicator (CTA), and emesis basin.

Standards: Removed sutures or staples without reopening the wound site and causing further injury to the patient.

Performance Steps

1. Prepare for the removal of sutures and/or staples.
 - a. Gather equipment from exam room.
 - b. Explain procedure to patient.

NOTE: Patient may feel some slight pain or tingling at extraction site.

2. Clean wound site.

NOTE: This should be done in order to remove any dried blood and crusting from wound.

- a. Drape patient as necessary.
 - b. Pour antiseptic cleaning solution into emesis basin.
 - c. Dip CTA into solution.
 - d. Gently rub wound site with CTA.
 - e. Repeat process until wound site is generally free of blood and crusting.
3. Remove sutures.
 - a. Pick up first suture with forceps, cut with scissors, and pull suture out of wound.
 - b. Repeat process until all sutures have been removed.
 - c. If there are no staples, go to step 4d.

4. Remove staples.
 - a. Insert staple remover's lower jaw under the first staple.
 - b. Depress remover handle until staple retracts from skin.

NOTE: Large incisions may require removal of every other staple due to tension along incision site.

- c. Repeat process until all staples have been removed.
- d. Clean wound site.

5. Have physician inspect wound site.

NOTE: Perform any additional care as directed by the physician.

6. Apply adhesive strips if directed by physician.
 - a. Apply adhesive to the noninjured area on opposing sides of the incision.
 - b. Open adhesive strip package.
 - c. Remove inner adhesive strip sheet.
 - d. Cut adhesive strip sheet to desired length.

NOTE: Adhesive strips should extend 1/2 to 1 inch on either side of wound.

- e. Apply adhesive strips evenly over incision.

7. Document per local SOP.

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

1. Prepared for removal of sutures and/or staples.
2. Cleaned wound site.
3. Removed sutures/staples.
4. Had physician inspect wound site.
5. Documented per local SOP.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

REMOVE NASAL SPLINTS**081-830-2027**

Conditions: You have a patient who has a nasal splint and a physician's orders to remove it. You will need adhesive remover, cotton tipped applicators (CTA), alcohol, exam gloves, exam chair, and 4x4s.

Standards: Removed nasal splint without further injuring the patient.

Performance Steps

1. Gather equipment and supplies.
 - a. Create a nonsterile field near the patient.
 - b. Open supplies onto field.
2. Explain procedure to patient.
3. Position patient.
 - a. Recline patient to a comfortable position.
 - b. Support head with headrest of exam chair.
 - c. Raise exam chair to a position that gives easy access to splint.
4. Detach splint.
 - a. Don exam gloves.
 - b. Remove all tape that may have been placed over splint and cheeks.
 - c. Have the patient close their eyes.
 - d. Open adhesive remover solution and apply to CTA.
 - e. Apply adhesive remover/CTA to top edge of splint to dissolve adhesive.

CAUTION: Take care to keep alcohol and adhesive remover away from the patient's eyes.

- f. As splint edge detaches from nose, insert CTA under splint.
- g. Spin CTA under splint and move laterally.

NOTE: This applies gentle pressure to underside of the splint to detach it from nose.

- h. Repeat with additional CTAs until splint is completely detached from nose.

5. Clean nasal area.
 - a. Apply adhesive remover to 4x4 and remove all residual adhesive from nose/cheek area.
 - b. Apply alcohol to 4x4 and wipe nose.

NOTE: This will neutralize adhesive remover and remove dirt.

6. Document procedure per local SOP.
7. Clean exam room in IAW task 081-830-2009.

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

1. Gathered equipment and supplies.
2. Explained procedure to patient.
3. Positioned patient.
4. Detached splint.

_____	_____
_____	_____
_____	_____
_____	_____

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

- | | | |
|---|-------|-------|
| 5. Cleaned nasal area. | _____ | _____ |
| 6. Documented procedure per local SOP. | _____ | _____ |
| 7. Cleaned exam room IAW task 081-830-2009. | _____ | _____ |

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

PERFORM TRACHEOSTOMY MAINTENANCE

081-830-2028

Conditions: You have an adult patient requiring tracheostomy care. You will need a tracheostomy cleaning kit, sterile and nonsterile gloves, masks, protective eyewear, suction apparatus, tracheostomy suctioning kit, trach tapes, sterile 4x4 gauze, normal saline, hydrogen peroxide, a 5-cc syringe, and an oxygen source with flow meter.

Standards: Provided tracheostomy care without causing further injury to the patient.

Performance Steps

1. Position the patient in a comfortable position (upright or reclining).
2. Explain the procedure to the patient.
3. Oxygenate the patient.

NOTE: Have the patient hold the tracheostomy (trach) mask over the trach site for at least 60 seconds.

4. Prepare the sterile supplies and equipment for suctioning and tracheostomy care.
 - a. Open the tracheostomy cleaning kit and use the inner wrapper to set up a sterile field.
 - b. Open the normal saline container and pour the solution into the sterile container from the trach cleaning kit.
 - c. Open the suction catheter package onto the sterile field.

CAUTION: To avoid causing hypoxia during suctioning, ensure that the diameter of the suction catheter is no greater than one-half the diameter of the tracheostomy tube.

- d. Open sterile dressings and other supplies and place them on the sterile field.
 - e. Pour hydrogen peroxide into one basin.
5. Put on a mask, protective eye wear, and sterile gloves.
 6. Check the suction catheter for patency.
 - a. Pull the catheter from the package with the sterile hand, keeping the catheter coiled in your hand to maintain sterility.
 - b. Grasp the connecting tubing with your nonsterile hand and connect to the catheter.

CAUTION: The glove on your dominant hand must be sterile. The glove on your nondominant hand is for your protection and is not considered sterile.

- c. Turn on the suction apparatus with the nonsterile hand.

7. Suction the patient's tracheostomy.

CAUTION: Suctioning should always be done immediately prior to tracheostomy care.

- a. Lubricate the tip of the catheter with normal saline.
- b. Insert the catheter, without suction, into the tracheostomy tube until slight resistance is felt.
- c. Apply suction by moving your thumb over the suction control port.
- d. Slowly move catheter in and out 1" to 2" for approximately 5-10 seconds.

NOTE: If the secretions are tenacious, instill 3 to 5 cc of normal saline (as directed by the physician) into the tracheostomy tube. This will liquify the secretions and facilitate their removal as you continue to suction.

- e. Slowly and gently rotate the catheter between the thumb and index finger of your sterile hand as you withdraw the catheter from the tracheostomy tube.

Performance Steps

CAUTION: Suctioning removes oxygen as well as secretions. Suction for no longer than 10 to 15 seconds at a time. Oxygenate the patient prior to the start of the procedure, between suctionings, and at the end of the procedure.

- f. Remove catheter and have patient place mask over the trach site for at least 60 seconds.

NOTE: Oxygenate the patient between suctionings and after the last suctioning.

- g. Rinse the suction catheter by suctioning a small amount of normal saline through the catheter.

NOTE: Rinse the catheter between suctionings and after the last suctioning.

- h. Repeat steps 7a through 7g until the secretions are clear.

8. Clean the tracheostomy site.

- a. Carefully remove the soiled dressing, observing it for type and amount of drainage, if any.
- b. Observe condition of the site for bloody discharge, signs of infection, or abrasion.
- c. Using cotton tipped applicators (CTAs) from the cleaning kit that have been moistened with saline solution, carefully clean around the tracheostomy tube.

NOTE: If incrustations are present around the stoma site, it may be necessary to remove them with hydrogen peroxide. Take care not to let the peroxide enter the tracheostomy.

- d. Pat the area dry with sterile gauze.

9. Clean the inner cannula.

- a. Unlock the inner cannula and gently pull it out.
- b. Immerse the inner cannula in hydrogen peroxide.
- c. Suction the outer cannula.
- d. Clean the inner cannula with the sterile brush from the tracheostomy cleaning kit.
- e. Be sure to remove all secretions and incrustations from both the inside and outside of the inner cannula.
- f. Rinse the inner cannula thoroughly with normal saline and pat dry with 4x4s.

10. Reinsert the inner cannula.

- a. Insert the inner cannula into the outer cannula.
- b. Lock the inner cannula into place.

11. Replace soiled trach ties.

- a. Ask the patient to hold outer cannula securely in position while you change the ties.
- b. Cut and remove the trach ties.
- c. Secure the new ties to the flanges of the outer cannula.

NOTE: The neck tapes should not be tied so tightly that they cause discomfort to the patient. You should be able to slip one or two fingers under the neck tapes.

12. Apply a sterile dressing.

- a. Apply the prepared sterile dressing from the kit.
- b. Position the dressing under the flanges of the outer cannula.

NOTE: The gauze dressing is placed under the tube to absorb secretions. This piece of gauze should be changed as often as necessary.

13. Clean up the room IAW task 081-830-2009.

14. Record the care provided and significant nursing observations on the appropriate forms IAW local SOP.

- a. Note the type and amount of drainage on the dressing, if any.

Performance Steps

- b. Describe the appearance of the tracheostomy site.
- c. Note the type and amount of secretions suctioned.
- d. Describe the patient's tolerance of the procedure.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Positioned the patient and explained the procedure.	_____	_____
2. Oxygenated the patient before, between, and after suctioning.	_____	_____
3. Prepared sterile supplies and equipment.	_____	_____
4. Put on mask, protective eye wear, and sterile gloves.	_____	_____
5. Suctioned the patient.	_____	_____
6. Cleaned the tracheostomy site.	_____	_____
7. Cleaned the inner cannula.	_____	_____
8. Reinserted the inner cannula into the outer cannula.	_____	_____
9. Replaced soiled trach ties.	_____	_____
10. Applied a sterile dressing.	_____	_____
11. Cleaned the exam room.	_____	_____
12. Recorded the care provided and significant nursing observations IAW local SOP.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

PERFORM ENDOSCOPE MAINTENANCE

081-830-2033

Conditions: You have a postprocedural endoscope (flexible or rigid) that requires maintenance. You will need personal protective equipment (PPE), alcohol pads, sink with running water, locally approved disinfectant solution, soak container, dirty endoscope container, infection control SOP, nonsterile gloves, wash basin, cleaning brush, towels, cleaning solution, and local repair SOP.

Standards: Cleaned endoscope to manufacturer's recommendations and local infection SOP without contaminating self.

Performance Steps

1. Collect dirty endoscopes from exam or procedure rooms.
 - a. Don nonsterile gloves.
 - b. Remove dirty endoscopes from procedure room.
 - c. Place in dirty endoscope container.
 - d. Remove gloves and discard them.
 - e. At completion of the day or when clean endoscopes are needed, take dirty endoscope container to dirty instrument area.
2. Don personal protective equipment (PPE).
 - a. Put on and secure gown.
 - b. Put on and secure surgical mask.

NOTE: Surgical mask may or may not include an eye shield.

 - c. Put on eye protection glasses if not included with mask.
 - d. Put on nonsterile gloves.

NOTE: Gloves should cover ends of protective gown sleeves.
3. Clean endoscopes.
 - a. Place wash container in sink.
 - b. Fill wash container with warm water and cleaning solution.

NOTE: Some flexible scopes require a leak test prior to submersion.

 - c. Place dirty endoscope in wash container.
 - d. Use cleaning brush and cleaning solution mixture to brush away organic material.
 - e. Rinse cleaning solution from endoscope.

NOTE: If any organic material remains, repeat steps 3d and 3e.

 - f. Place endoscope in soak container filled with disinfectant solution.

NOTE: Endoscopes should remain in disinfectant solution as per manufacturer's instructions and local infection control SOP.

 - g. Repeat cleaning process until all endoscopes are processed.
 - h. Remove PPE.
 - i. After soak time has elapsed, put on protective gloves.
 - j. Remove endoscopes from soak solution.
 - k. Thoroughly rinse endoscopes in sink with running water.
 - l. Wipe down each endoscope with alcohol pad.

NOTE: Pay special attention to the lens and remove any residue present.

 - m. Using a towel, dry each one completely.
4. Inspect endoscope.
 - a. Hold endoscope eyepiece to eye and hold distal end to room light.

Performance Steps

- b. Lens view should be clear and without black spots or patches.

NOTE: Black spots or patches are a sign of fiberoptic breakage in the endoscope.

- c. Inspect shaft for burrs or torn covering.
- d. If any defects are found, remove endoscope from service and send for repair per local SOP.
- e. Return clean and defect free endoscopes to storage area for next use.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Collected dirty endoscopes.	_____	_____
2. Donned personal protective equipment.	_____	_____
3. Cleaned endoscopes.	_____	_____
4. Inspected endoscopes and selected proper disposition.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

Subject Area 3: ENT Clinic Surgical Procedures

ASSIST WITH A SURGICAL PROCEDURE IN A CLINIC EXAM ROOM**081-830-2022**

Conditions: You have a patient who will undergo a procedure under local anesthetic. You will need an exam chair, pulse oximeter, electrocautery, prep swabs, Mayo stand, surgical mask, eye protection, surgical instrument set, specimen container, sterile gloves, sterile towels, suture, suction, local anesthetic, and syringe with needle.

Standards: Prepared the sterile field and assisted with the procedure without contaminating patient, supplies, or equipment.

Performance Steps

1. Gather equipment and supplies for surgical procedure per physician's orders.

NOTE: Each doctor may require a specific set of instruments for each procedure.

2. Prepare patient for surgical procedure.
 - a. Retrieve patient from waiting room.
 - b. Verify patient identity and procedure per local SOP.

NOTE: Ask patient his or her name and verify with the doctor and patient medical records.

- c. Explain the procedure.
- d. Position patient for optimal access to surgical site, determined by the type of surgery.
- e. Perform patient care hand wash.
- f. Prep surgical site of procedure.
 - (1) Don exam gloves.
 - (2) Open Betadine swab.

NOTE: You may use Betadine swabs or locally approved prep solution.

- (3) Using swab, start in the center of the surgical site and move in an increasing diameter spiral around the site.
- (4) Repeat step 2f(3) with second swab.
- (5) Remove gloves and discard along with swabs.

3. Prepare surgical supplies and equipment.
 - a. Don surgical mask.
 - b. Don eye protection if not included with surgical mask.
 - c. Create sterile field on Mayo stand.

NOTE: The sterile field may be on a Mayo stand and/or an open area near exam chair.

- d. Open all individually wrapped sterile supplies onto sterile field.

NOTE: Any breach in sterile technique will result in contamination of equipment and supplies. All contaminated equipment and supplies must be replaced with new and procedure restarted.

4. Perform preparation of operating area.
 - a. Perform patient care hand wash with antimicrobial soap and dry with sterile towel.
 - b. Don sterile gloves.
 - c. Drape patient with sterile towels.
 - d. Open sterile peel packs from equipment cases and place supplies on sterile field.
 - e. Arrange instruments and supplies in order of use and convenience.
 - f. Insert suction tip into suction tubing.
 - g. Test battery operated electrocautery and suction for power and operation.

Performance Steps

5. Assist with procedure as directed by doctor.
 - a. Pass all instruments in the position of function.
 - b. Load needle drivers with sutures.
 - c. Apply intermittent suction as needed.
 - d. Cut suture at physician's request.
 - e. Retract tissue PRN.
 - f. Secure specimens.
6. Take postprocedure vital signs.
7. Clean operating room IAW task 081-830-2009.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Gathered equipment and supplies for surgical procedure.	_____	_____
2. Prepared surgical supplies and equipment.	_____	_____
3. Prepared patient for surgical procedure.	_____	_____
4. Performed preparation of operating area.	_____	_____
5. Gowned and gloved doctor.	_____	_____
6. Assisted with procedure as directed by doctor.	_____	_____
7. Cleaned operating room IAW task 081-830-2009.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

ASSIST WITH CLOSED NASAL FRACTURE REDUCTION

081-830-2011

Conditions: You have a physician's orders and a patient requiring a closed nasal fracture reduction. You will need an exam chair, Mayo stand, exam/treatment unit, 2% lidocaine spray, Afrin spray, Frazier suction tip, suction apparatus, sterile suction tubing, sterile towels, sterile gloves, nasal packing material, lidocaine carpule, 2x2 gauze, 1/2 inch tape, fiberoptic headlight, light source, dental syringe, 27 gauge dental needle, Vienna nasal speculum, Sayer nasal elevator, Ashe forceps, and nasal splint.

Standards: Set up and assisted with closed nasal reduction without contaminating self, supplies, or physician. Did not cause further injury to patient.

Performance Steps

1. Gather equipment and supplies.
 - a. Drape Mayo stand.
 - b. Open all sterile supplies onto Mayo stand.
 - c. Prepare anesthetic.
 - (1) Open dental needle and twist onto dental syringe.
 - (2) Insert lidocaine carpule into dental syringe.
 - (3) Tap plunger on dental syringe to puncture lidocaine carpule.
2. Position patient sitting up with head supported against headrest.
3. Apply vasoconstrictor and topical anesthetic.
 - a. Open nasal passage with Vienna nasal speculum.
 - b. Apply Afrin and 2% lidocaine spray as directed by physician.

NOTE: Have patient inhale deeply through nose to ensure spray reaches as much of nasal passage as possible.

4. Put on sterile gloves.
5. Drape patient with sterile hand towels.

NOTE: Towels should form a V in front of patient.
6. Assemble suction apparatus.
 - a. Insert Frazier suction tip to sterile suction tubing.
 - b. Twist opposite end of suction tubing onto suction apparatus.
7. Assist physician with procedure.

NOTE: Apply intermittent suction to nasal cavity when instructed by physician.

 - a. Pass dental syringe to physician.
 - b. Receive syringe back from physician.
 - c. Pass Sayer nasal elevator to physician.
 - d. Receive Sayer nasal elevator back from physician.

8. Prepare nasal packing material.

NOTE: Nasal packing will vary depending on availability and physician preferences.

9. Prepare splinting material per manufacturer's instructions.

NOTE: Splinting material will vary depending on availability and physician preferences.

10. Tape a 2x2 gauze with 1/2 inch tape under nose to absorb drainage.

Performance Steps

11. Brief patient.
 - a. Instruct patient to get follow-up appointment within 2 weeks.
 - b. Sneeze with mouth open.
 - c. Do not blow his or her nose.
 - d. Do not wear glasses/sun glasses.
 - e. No nose picking.
12. Clean treatment room (see task 081-830-2009).

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Gathered equipment and supplies.	_____	_____
2. Positioned patient sitting upright with head supported against headrest.	_____	_____
3. Applied vasoconstrictors and topical anesthetic.	_____	_____
4. Donned sterile gloves.	_____	_____
5. Draped patient.	_____	_____
6. Assembled suction apparatus.	_____	_____
7. Assisted physician with procedure.	_____	_____
8. Prepared nasal packing material.	_____	_____
9. Prepared splinting material.	_____	_____
10. Taped a 2x2 gauze with 1/2 inch tape under nose to absorb drainage.	_____	_____
11. Briefed patient.	_____	_____
12. Cleaned treatment room.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

ASSIST WITH MYRINGOTOMY**081-830-2023**

Conditions: You have a patient requiring a myringotomy, a physician's orders, and a signed consent form. You will need an exam chair, operating microscope, myringotomy set, drape, exam/treatment unit, sterile gloves, pressure equalization tube PE/paper patch, dental syringe, 27 gauge dental needle, 2% lidocaine carpule, cortisporin otic suspension, and cotton balls.

Standards: Set up clinic exam room and assisted the physician with a myringotomy procedure without contaminating supplies, self, patient, or physician.

Performance Steps

1. Prepare the patient for myringotomy.
 - a. Explain procedure.
 - b. Position patient in exam chair and drape.
 - c. Prepare local anesthetic (dental syringe, 27 gauge dental needle, and 2% lidocaine carpule).

2. Gather supplies and equipment.

CAUTION: If any sterile supplies are contaminated, all must be replaced with new sterile supplies.

3. Don sterile gloves.
4. Assemble suction.
5. Pass instruments in position of function to physician.
6. Give patient postoperative instructions/precautions.
 - a. Keep ear dry.
 - b. Take medications as directed.
 - c. If eardrum is patched, avoid pressure by coughing or sneezing with mouth open.
 - d. Make follow-up appointment.
7. Clean treatment room (see task 081-830-2009).

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Prepared the patient for myringotomy.	_____	_____
2. Gathered supplies and equipment.	_____	_____
3. Donned sterile gloves.	_____	_____
4. Assembled suction.	_____	_____
5. Passed instruments in position of function to physician.	_____	_____
6. Gave patient postoperative precautions.	_____	_____
7. Cleaned treatment room.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

ASSIST WITH PERITONSILLAR ABSCESS

081-830-2031

Conditions: You have a patient with a peritonsillar abscess, physician's orders, and a signed consent form. You will need sterile towels, towel clamps, chux, dental syringe with 27 ga needle, topical and local anesthetic, 18 ga spinal needle with a 10 cc syringe, emesis basin, tongue depressor, laryngeal mirror, cotton tipped applicators, lab slips, labels, Yankauer suction, culture media, 7" knife handle with #11 blade, tonsil hemostats, mosquito forceps, and Mayo stand.

Standards: Set up and assisted the physician without contaminating self, supplies, or physician. Collected specimens and transported to laboratory.

Performance Steps

1. Gather equipment and supplies and place them on the Mayo stand.

NOTE: Cover Mayo stand with chux and sterile towel.

- a. Prepare dental syringe with 27 ga needle with local anesthetic per physician's orders.
 - b. Assemble knife handle with #11 blade using mosquito forceps holding the blade.
 - c. Prepare two lab slips and two labels with patient's identification.
 - d. Prepare culture media.
2. Prepare patient for procedure.
 - a. Explain procedure to patient.
 - b. Drape the patient.
 3. Assist the physician with the procedure.
 - a. Administer topical anesthetic with cotton tipped applicator or as directed by the physician.
 - b. Pass dental syringe with 27 ga needle to the physician.
 - c. Hand the patient the emesis basin for expectorant.
 - d. Receive dental syringe with 27 ga needle back from the physician.
 - e. Pass the syringe with an 18 ga spinal needle to the physician for specimen collection.
 - f. Receive the specimen collected by physician and place on Mayo stand.
 - g. Use Yankauer suction to clean out debris.
 - h. Pass the scalpel to the physician.
 - i. Receive the scalpel back from the physician.
 - j. Pass the mosquito forceps to the physician.
 - k. Receive the mosquito forceps back from the physician.
 - l. Suction out debris.
 4. Prepare specimen for culture.
 - a. Saturate the culture media with specimen material.
 - b. Apply labels to each culture.
 5. Clean treatment area. (See task 081-830-2009, step 2.)

Performance Measures	<u>GO</u>	<u>NO GO</u>
1. Gathered equipment and supplies and placed them on the Mayo stand. <i>NOTE:</i> Covered Mayo stand with chux and sterile towel.	—	—
a. Prepared dental syringe with 27 ga needle with local anesthetic per physician's orders.		
b. Assembled knife handle with #11 blade using mosquito forceps holding the blade.		
c. Filled out two lab slips and two labels with patient's identification.		
d. Prepared culture media.		
2. Prepared patient for procedure.	—	—
a. Explained procedure to patient.		
b. Draped the patient.		
3. Assisted the physician with the procedure.	—	—
a. Administered topical anesthetic with cotton tipped applicator or as directed by the physician.		
b. Passed dental syringe with 27 ga needle to the physician.		
c. Handed the patient the emesis basin for expectorant.		
d. Received dental syringe with 27 ga needle back from the physician.		
e. Passed the syringe with an 18 ga spinal needle to the physician for specimen collection.		
f. Received the specimen collected by physician and placed on Mayo stand.		
g. Used Yankauer suction to clean out debris.		
h. Passed the scalpel to the physician.		
i. Received the scalpel back from the physician.		
j. Passed the mosquito forceps to the physician.		
k. Received the mosquito forceps back from the physician.		
l. Suctioned out debris.		
4. Prepared specimen for culture.	—	—
a. Saturated the culture media with specimen material.		
b. Applied labels to each culture.		
5. Cleaned treatment area. (See task 081-830-2009, step 2.)	—	—

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

ASSIST WITH FINE NEEDLE ASPIRATION**081-830-2032**

Conditions: You have a patient who needs a fine needle aspiration, a physician's orders, and a signed consent form. You will need an 18 ga needle, IV tubing with 3 way stopcock, 30-60 cc syringes, sterile gloves, alcohol pads, frosted slides, labels, 4x4s, 2x2s, skin marker, band aids, tape, povidone-iodine swabs, sterile water, culture media (RPMI 1640), harvesting pistol, and an exam chair.

Standards: Set up and assisted the physician without contaminating self, supplies, or physician. Collected specimen and transported to the laboratory.

Performance Steps

1. Gather equipment and supplies.
 - a. Assemble 3 way stopcock with syringe and 18 ga needle.
 - b. Load 30-60cc syringe and 18 ga needle in harvesting pistol as directed by the physician.
 2. Prepare patient.
 - a. Explain the procedure.
 - b. Drape the patient with a towel.
 - c. Position patient in exam chair with head against headrest.
 3. Put on sterile gloves.
 4. Prepare site/area.
 - a. Swab with povidone-iodine swab; start in center and rotate out x 2.
 - b. Swipe fine needle aspiration (FNA) site with alcohol pad.
 5. Assist physician with procedure (stopcock or harvesting pistol).
 - a. If using the stopcock, after the physician inserts the needle into the FNA site the technician maintains a steady pull on syringe. When physician states he is removing the needle, turn off the stopcock. Repeat process as directed by the physician.
 - b. If using the harvesting pistol, hand it to the physician. The physician will draw the cells and hand the harvesting pistol back to the technician. Repeat process as directed by the physician.
 - c. Place the cells onto the slides.
 - d. Swipe the slides.
 - e. Place one slide into the fixative solution (alcohol).
 - f. Let the other slide air dry.
 - g. Draw RPMI 1640 into the stopcock tubing/harvesting pistol syringe and flush back into RPMI 1640 vial.
 - h. Repeat steps 5c through 5g for additional passes.
 6. Clean the patient.
 - a. Clean site with sterile water and 4x4.
 - b. Wipe entire area.
 - c. Dry off area with 4x4 (use band aid or 2x2 to cover site if bleeding).
- NOTE:** Monitor the patient for 5-10 minutes for adverse reactions to procedure.
7. Clean examination room. (See task 081-830-2009, step 2.)

Performance Measures	<u>GO</u>	<u>NO GO</u>
1. Gathered equipment and supplies.	_____	_____
a. Assembled 3 way stopcock with syringe and 18 ga needle.		
b. Loaded 30-60 cc syringe and 18 ga needle in harvesting pistol as directed by the physician.		
2. Prepared patient.	_____	_____
a. Explained the procedure.		
b. Draped the patient with a towel.		
c. Positioned patient in exam chair with head against headrest.		
3. Put on sterile gloves.	_____	_____
4. Prepared site/area.	_____	_____
a. Swabbed with povidone-iodine swab; started in center and rotated out x 2.		
b. Swiped fine needle aspiration (FNA) site with alcohol pad.		
5. Assisted physician with procedure (stopcock or harvesting pistol).	_____	_____
a. If using the stopcock, after the physician inserted the needle into the FNA site the technician maintained a steady pull on syringe. When physician stated he was removing the needle, turned off the stopcock. Repeated process as directed by the physician.		
b. If using the harvesting pistol, handed it to the physician. The physician drew the cells and handed the harvesting pistol back to the technician. Repeated process as directed by the physician.		
c. Placed the cells onto the slides.		
d. Swiped the slides.		
e. Placed one slide into the fixative solution (alcohol).		
f. Let the other slide air dry.		
g. Drew RPMI 1640 into the stopcock tubing/harvesting pistol syringe and flushed back into RPMI 1640 vial.		
h. Repeated steps 5c through 5g for additional passes.		
6. Cleaned the patient.	_____	_____
a. Cleaned site with sterile water and 4x4.		
b. Wiped entire area.		
c. Dried off area with 4x4 (used band aid or 2x2 to cover site if bleeding).		
NOTE: Monitored the patient for 5-10 minutes for adverse reactions to procedure.		
7. Cleaned examination room. (See task 081-830-2009, step 2.)	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

Subject Area 4: ENT Operating Room Surgical Procedures

ASSIST WITH A CHEMICAL FACIAL PEEL**081-830-2016**

Conditions: You have a patient and physician's orders for chemical facial peel. You have the assistance of a circulating nurse. You will need an operating table, specimen cup, chemical peel solution, Mayo stand, sterile gloves, sterile gowns, sterile towels, eye protection, surgical hat, surgical mask, cotton tip applicators, Bacitracin or locally approved facial lubricant, and 4x4 gauze.

Standards: Completed setup and assisted physician without contaminating self, supplies, patient, or physician.

Performance Steps

1. Don personal protective equipment.
 - a. Surgical hat.
 - b. Surgical mask.
 - c. Eye protection if not included with surgical mask.
2. Gather and prepare supplies for procedure.
 - a. Open sterile towels on Mayo stand and use inner wrapper as sterile field.
 - b. Open sterile CTAs, specimen cup, and sterile 4x4s onto sterile field.

NOTE: Any breach in sterile technique will result in contamination of equipment and supplies. All contaminated equipment and supplies must be replaced with new and procedure restarted.

3. Prepare patient for procedure.
 - a. Retrieve patient from waiting room or preadmission room.

NOTE: Circulating nurse or tech must stay in the operating room after sterile supplies are opened to ensure that nothing becomes contaminated.

- b. Verify patient identity and procedure per local SOP.

NOTE: Ask patient his or her name or check hospital band or wrist and verify with surgery schedule.

- c. Direct patient to change into surgical gown in adjacent room.

NOTE: Patient may or may not already be changed, depending on depth of preadmission work up.

- d. Explain procedure.
 - e. Position patient for optimal access to surgical site.

NOTE: Position is determined by surgery and surgical site.

- f. Secure patient to operating table with safety belts.
 - g. Attach monitoring devices.

- (1) Blood pressure cuff.

- (a) Place patient's palm upward at approximately heart level.

- (b) Place cuff so lower edge is 1-2 inches above the elbow and the bladder portion is over the artery.

- (c) Wrap the cuff tightly enough to prevent slipping.

- (2) Pulse oximeter.

- (a) Straighten patient's index finger of hand closest to equipment.

- (b) Open oximeter probe in a clothespin motion.

- (c) Place open end of oximeter over index finger and allow to close.

Performance Steps

- h. Don sterile gloves.
 - 4. Drape patient.
 - a. Wrap sterile towel around head to ensure that hair does not enter surgical site.
 - b. Place additional towels to cover shoulders, neck, and areas not involved in procedure.
 - 5. Dip CTA in chemical solution and hand to the physician. Repeat as required by the physician.
- NOTE:** Chemical solution may be phenol, trichloroacetic acid, or alpha hydroxy acid.

CAUTION: Ensure that chemical solution does not touch your skin, the physician's skin, or any area of the patient that is not involved in the procedure.

- 6. Hand 4x4s to the physician.
- 7. Squeeze Bacitracin or locally approved facial lubricant on 4x4 and hand to the physician.
- 8. Remove monitoring devices and safety belt from the patient.
- 9. Instruct the patient.
 - a. Apply lubricant PRN.
 - b. Stay out of direct sun.
 - c. Make a follow-up appointment for one week hence.
 - d. Emphasize increased fluid intake.
 - e. Precautions that require immediate return to the clinic or primary care physician.
 - (1) Allergic reaction.
 - (2) Anaphylaxis.
 - (3) Signs of infection.
 - (4) Scabbing.
- 10. Clean the room IAW task 081-830-2009.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Donned personal protective equipment.	_____	_____
2. Gathered and prepared supplies for procedure.	_____	_____
3. Prepared patient for the procedure.	_____	_____
4. Draped the patient.	_____	_____
5. Dipped the CTA in chemical solution and handed it to the physician.	_____	_____
6. Handed 4x4s to the physician.	_____	_____
7. Squeezed lubricant on 4x4s and handed to physician.	_____	_____
8. Removed monitoring devices and safety belt.	_____	_____
9. Instructed patient.	_____	_____
10. Cleaned up the room.	_____	_____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

ASSIST WITH LASER RESURFACING**081-830-2019**

Conditions: You have a patient who requires a laser resurfacing procedure and a physician's orders. A scrub nurse or tech will be available to assist. You will need an operating table, resurfacing laser, syringe with needle, lidocaine with epinephrine, Mayo stand, back table, patient drape, sterile gloves, sterile gowns, sterile towels, electrocautery, laser masks, laser eye protection, and warning sign.

Standards: Completed setup without contaminating self, supplies, patient, or physicians. Assisted without causing any injury to patient.

Performance Steps

1. Don personal protective equipment.
 - a. Surgical hat.
 - b. Laser mask.
 - c. Laser eye protection.
2. Gather and prepare supplies for procedure.
 - a. Open sterile towels on Mayo stand and use inner wrapper as sterile field.
 - b. Open sterile tongue depressor.

NOTE: Any breach in sterile technique will result in contamination of equipment and supplies. All contaminated equipment and supplies must be replaced with new and procedure restarted.

- c. Power laser "on" per manufacturer's specifications.

CAUTION: Prior to operating any laser equipment you must be certified on its use.

- d. Test fire laser on wooden tongue depressor.

NOTE: Laser should char test area on the tongue depressor.

3. Prepare room for procedure.
 - a. Secure laser warning sign to exterior of surgical room door.
 - b. Place extra laser eye protection and laser masks on exterior of surgical room door.

NOTE: Any additional personnel who enter surgical room must don protective equipment.

4. Prepare patient for procedure.
 - a. Retrieve patient from waiting room or preadmission room.

NOTE: Circulating nurse or tech must stay in the operating room after sterile supplies are opened to ensure that nothing becomes contaminated.

- b. Verify patient identity and procedure per local SOP.

NOTE: Ask patient his or her name or check hospital band or wrist and verify with surgery schedule.

- c. Direct patient to change into surgical gown in adjacent room.

NOTE: Patient may or may not already be changed, depending on depth of preadmission work up.

- d. Explain procedure.
- e. Position patient for optimal access to surgical site.

NOTE: Position is determined by surgery and surgical site.

- f. Secure patient to operating table with safety belts.

- g. Attach monitoring devices.

- (1) Blood pressure cuff.

- (a) Place patient's palm upward at approximately heart level.

Performance Steps

- (b) Place cuff so lower edge is 1-2 inches above the elbow and the bladder portion is over the artery.
- (2) Pulse oximeter.
 - (a) Straighten patient's index finger of hand closest to equipment.
 - (b) Open oximeter probe in a clothespin motion.
 - (c) Place open end of oximeter over index finger and allow to close.
- h. Don sterile gloves.
- 5. Drape patient.
 - a. Wrap sterile towel around patient's head to ensure that hair does not enter surgical site.
 - b. Place additional towels to cover shoulders, neck, and areas not involved in procedure.
 - c. Place eye protection on patient.
- 6. Assist with procedure.
 - a. Place handpiece of laser in physician's hand.
 - b. Adjust laser setting per physician's instructions.
- 7. Squeeze Bacitracin or locally approved facial lubricant on 4x4 and hand to the physician.
- 8. Remove monitoring devices and safety belt from the patient.
- 9. Instruct the patient.
 - a. Apply lubricant PRN.
 - b. Stay out of direct sun.
 - c. Make a follow-up appointment for 1 week hence.
 - d. Emphasize increased fluid intake.
 - e. Precautions that require immediate return to the clinic or primary care physician.
 - (1) Allergic reaction.
 - (2) Anaphylaxis.
 - (3) Signs of infection.
 - (4) Scabbing.
- 10. Clean the room IAW task 081-830-2009.

Performance Measures

	<u>GO</u>	<u>NO GO</u>
1. Donned protective equipment.	_____	_____
2. Gathered and prepared supplies for procedure.	_____	_____
3. Prepared room.	_____	_____
4. Prepared the patient.	_____	_____
5. Draped the patient.	_____	_____
6. Assisted with the procedure.	_____	_____
7. Squeezed Bacitracin or locally approved lubricant on 4x4 and handed to physician.	_____	_____
8. Removed monitoring devices and safety belt.	_____	_____

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

9. Instructed the patient.

_____	_____
-------	-------

10. Cleaned the room.

_____	_____
-------	-------

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

ASSIST WITH A SURGICAL PROCEDURE IN A CLINICAL OPERATING ROOM

081-830-2020

Conditions: You have a physician's orders for a surgical procedure to be done on a patient under sedation, and the assistance of a surgical nurse. You will need instrument sets, patient drapes, basin packs, suture, saline, sterile gloves, sterile gowns, surgical hats, surgical masks, syringes with needles (various sizes), sterile towels, IV solution, IV tubing, pulse oximeter, EKG machine, electrocautery machine and ground pad, suction unit, a crash cart, blood pressure cuff, antimicrobial soap, and betadine swabs.

Standards: Completed setup without contaminating self, supplies, or physicians.

Performance Steps

1. Gather equipment and supplies for surgical procedure.

- a. Identify surgical procedure.

NOTE: Directed by doctor or listed in surgical schedule.

- b. Collect equipment and supplies for the specific surgical procedure.

NOTE: Each surgeon may have a specific set of instruments required for each surgical procedure. This is identified by the surgeon's case cards that are kept in central material services (CMS).

- (1) Browlift set (endoscopic).

- (2) Septorhinoplasty set.

- (3) Face lift set.

- (4) Blepharoplasty set.

- c. Test EKG, electrocautery, pulse oximeter, and suction for power and operation.

NOTE: If any equipment fails to function, remove from use and replace with functioning equipment.

2. Prepare surgical supplies and equipment.

- a. Don surgical hat and secure.

- b. Don surgical mask and secure.

- c. Don eye protection if not included with surgical mask.

- d. Open all sterile equipment cases near operating table.

- e. Open all additional surgical packs near operating table.

NOTE: Basin packs, basic packs, and specialized drape packs.

- f. Create sterile field near operating table.

NOTE: The sterile field may be on any or all of the following: Mayo stand, back table, basin stand, or open area near operating table.

- g. Open all individually wrapped sterile supplies onto the sterile field.

NOTE: Any breach in sterile technique will result in contamination of equipment and supplies. All contaminated equipment and supplies must be replaced with new and procedure restarted.

3. Prepare patient for surgical procedure.

- a. Retrieve patient from waiting room or preadmission room.

NOTE: Once sterile supplies are opened, circulating nurse or tech must stay in the room to ensure supplies are not contaminated.

- b. Verify patient identity and procedure per local SOP.

NOTE: Ask patient his or her name or check hospital band on wrist and verify with surgery schedule.

- c. Direct patient to change into surgical gown in adjacent room.

Performance Steps

NOTE: Patient may or may not already be changed, depending on depth of preadmission work up.

- d. Explain procedure.
- e. Remove and secure any jewelry or metallic objects for the patient.

NOTE: Electrocautery may injure the patient if it comes into contact with a metallic object.

- f. Position patient for optimal access to surgical site determined by type of surgery.
- g. Secure patient on operating table with table belts.

NOTE: This prevents patient from moving while under sedation.

- h. If not already completed, initiate an IV per physician's orders.
- i. Attach monitoring devices.

NOTE: Equipment variation may be present. Attach per manufacturer's recommendations.

- (1) Blood pressure cuff.
 - (a) Place patient's arm palm up at approximately heart level.
 - (b) Place the cuff so the lower edge is 1-2 inches above the elbow and the bladder portion is over the artery.
 - (c) Wrap the cuff tightly enough to prevent slipping.
- (2) Pulse oximeter.
 - (a) Straighten patient's index finger of hand closest to equipment.
 - (b) Open oximeter probe in a clothes pin motion.
 - (c) Place open end of oximeter on patient's index finger and allow to close.
- (3) Electrocautery grounding pad.
 - (a) Expose area of patient's hip or upper thigh closest to equipment.
 - (b) Remove adhesive cover of pad and discard.
 - (c) Place adhesive side of pad on patient's exposed area.
 - (d) Connect ground lead to electrocautery equipment.
- (4) EKG leads.
 - (a) Snap EKG pads to EKG leads.
 - (b) Peel adhesive cover from first pad and discard.
 - (c) View EKG lead module connector for placement of EKG lead.

NOTE: The module has a diagram with pad placement depicted.

- (d) Place adhesive side of EKG pad to patient area indicated on EKG lead module.
- (e) Repeat until all EKG leads have been attached.
- j. Prep surgical site of procedure.

- (1) Open prep set and pour in prep solution.

NOTE: You may use betadine swabs or locally approved prep solution.

- (2) Don sterile gloves.
- (3) Using included prep set swab, start in the center of the surgical site and move in an increasing diameter spiral around the site.

NOTE: Prep area must extend at least 2 inches beyond surgical site.

- (4) Repeat step 3i(3) with second swab.
- (5) Remove gloves and discard along with prep set.

4. Perform preparation of operating area.

- a. Perform patient care hand wash with antimicrobial soap and dry with sterile towel.
- b. Don sterile personal protective equipment.
 - (1) Surgical gown (ask nurse/physician for help to secure.)
 - (2) Sterile gloves.
- c. Drape patient with sterile patient drapes.
- d. Open sterile peel packs from equipment cases and place supplies on sterile field.

Performance Steps

- e. Arrange instruments and supplies in order of use and convenience.
- f. Insert suction tip into suction tubing.
- g. Insert electrocautery hand piece into electrocautery leads connector.
- h. Attach tubing and electrocautery leads to patient drape with towel clamp and drop distal ends to nurse for connections.

5. Gown and glove doctor.

- a. Drop sterile towel onto doctor's hands after he has washed hands.
- b. Grasp sterile gown at neckline and allow to unfold without touching floor.
- c. Wrap edges of external gown neckline over the back of your fingers.
- d. Hold gown at shoulder level and extended away from you.
- e. Allow doctor to insert both hands and arms into interior of gown.
- f. Push gown onto doctor's arms and torso, and then release gown.

NOTE: Do not push gown so far as to cause doctor's hands to exit sleeves.

- g. Grasp sterile gloves with edges draped over tips of fingers.
- h. Open gloves for doctor to insert hands.

NOTE: Doctor's hands should not touch exterior of gloves or any part of you. This would be a breach in sterile technique.

- i. Pull gloves onto doctor's hands past sterile gown sleeve edge.
- j. Have nurse assist securing physician's gown.

6. Assist with procedure as directed by doctor.

- a. Pass all instruments in the order of function.
- b. Load needle drivers with sutures.
- c. Apply intermittent suction as needed.
- d. Cut suture at physician's request.
- e. Retract tissue PRN.
- f. Secure specimens.

7. Clean operating room IAW task 081-830-2009.

Performance Measures

GO **NO**
GO

- 1. Gathered equipment and supplies for surgical procedure.
- 2. Prepared surgical supplies and equipment.
- 3. Prepared patient for surgical procedure.
- 4. Performed preparation of operating area.
- 5. Gowned and gloved doctor.
- 6. Assisted with procedure as directed by doctor.
- 7. Cleaned operating room IAW task 081-830-2009.

____ ____
____ ____
____ ____
____ ____
____ ____
____ ____
____ ____

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

ASSIST WITH NASAL POLYPECTOMY**081-830-2024**

Conditions: You have a patient requiring a nasal polypectomy and physician's orders. You will need an exam chair/operating table, nasal polypectomy kit, suction and air sources, topical and local anesthetic, specimen cup with 10% formalin, patient drape, sterile gloves, liquid atomizer bottle, dental syringe, standard syringe, dental needle, alcohol swab, 18 and 27 gauge needles, head mirror light source, Mayo stand, Mayo stand drape, patient drape, sterile towels, sterile gowns, cotton tipped applicators (CTAs), cotton pledgets, Vaseline 1/2"x72", electrocautery, silver nitrate, and 1/2" paper tape.

Standards: Set up exam/operating room with supplies and assisted without contaminating supplies, self, patient, or doctor.

Performance Steps

1. Prepare for nasal polypectomy.
 - a. Brief patient on procedure and ensure that consent form has been signed.
 - b. Position patient sitting with torso slanted slightly forward.
 - c. Drape patient from the neck down.

2. Assemble sterile and nonsterile supplies and equipment.
 - a. Nonsterile supplies.

(1) Open all packages and place in convenient area to procedure.

NOTE: Include head mirror, light source, suction, anterior packing, electrocautery, and nitrate sticks.

(2) Test suction source and electrocautery for correct operation.

NOTE: Nonfunctioning equipment must be removed and replaced with functioning equipment.

- b. Sterile supplies.

(1) Create sterile field on Mayo stand with Mayo stand drape or sterile towels.

(2) Open all packages and empty sterile contents onto sterile field.

NOTE: Include sterile gowns, sterile gloves, syringes, needles, speculum, nasal snare, takahashi forceps, suction tip, suction tubing, bayonet forceps, cotton tipped applicators, and cotton pledgets.

(3) Don sterile gloves.

(4) Arrange supplies in order of use.

NOTE: The usual order is: gowning, gloving, patient draping, and then procedure. If any sterile supplies or equipment become contaminated, they must be discarded and new ones acquired.

3. Prepare anesthetic.
 - a. Fill liquid atomizer bottle with topical anesthetic.
 - b. Local anesthetic.
 - (1) Dental syringe.
 - (a) Screw 27 ga dental needle onto syringe.
 - (b) Place anesthetic carpule into dental syringe.
 - (c) Depress plunger on syringe slightly to puncture carpule.
 - (2) Standard syringe.
 - (a) Wipe rubber top of anesthetic bottle with alcohol swab.
 - (b) Twist 18 ga needle onto syringe.
 - (c) Pull plunger of syringe halfway out.

Performance Steps

(d) Invert anesthetic bottle and puncture rubber top with needle.

(e) Depress syringe plunger to expel air into bottle.

NOTE: This causes pressure in the bottle to be greater than the syringe and allow for easier extraction of anesthetic.

(f) Pull plunger out of syringe until desired amount of anesthetic has been drawn.

(g) Remove needle from anesthetic bottle.

(h) Twist off 18 ga needle from syringe and discard in sharps container.

(i) Twist on 27 ga needle to syringe.

4. Assist with polypectomy.

a. If physician is not in the room, have him or her informed that the patient is ready.

b. Apply intermittent suction as directed by doctor.

c. Hand instruments to doctor in position of function.

d. Assist physician with anterior packing of the nose.

e. Obtain specimen and place in specimen cup with formalin.

f. Fill out specimen paperwork and send to laboratory.

5. Clean exam room IAW task 081-830-2009.

Performance Measures**GO****NO
GO**

1. Prepared for polypectomy.

2. Assembled all equipment on sterile field.

3. Prepared anesthetic.

4. Assisted with polypectomy.

5. Cleaned exam room IAW task 081-830-2009.

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be scored GO. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

PERFORM EXAM/OPERATING ROOM CLEANING**081-830-2009**

Conditions: You have an exam/operating room that requires cleaning. You will need nonsterile gloves, sharps container, biological waste bag, hand towel, trash receptacle, dirty linen basket, dirty instrument container, and locally approved disinfectant.

Standards: Removed all used supplies and biological waste without injuring or contaminating self.

Performance Steps

1. Prepare for cleaning.
 - a. Gather cleaning materials/equipment.
 - b. Put on nonsterile gloves, eye protection, and mask.
 2. Clean exam/operating room.
 - a. Identify and account for all sharps.
Examples: needles, disposable knives, surgical blades, and suture needles.
 - b. Place sharps in sharps container.
 - c. Ensure that all specimens are annotated and sent to the specimen lab.
 - (1) Annotate patient's name and identification number.
 - (2) Identify clinic and physician.
 - (3) Identify source and orientation of specimen.
 - (4) Document in clinical specimen book per local SOP.
 - d. Rinse all excess organic material from the instruments and wipe dry with a hand towel.
 - e. Place instruments in the dirty instrument container.
 - f. Place all linen in the dirty linen basket.
 - g. Place disposable drapes in a trash receptacle.
- NOTE:** Blood soaked drapes will be placed in a biohazard bag.
- h. Remove the suction canister and place in the biohazard bag.
 - i. Remove the trash container from the room and place in the trash pickup area.
 - j. Remove all biohazard bags from the room and place in the biohazard pickup area.
 - k. Remove all instruments to the dirty instrument area.
 - l. Wipe down surfaces to remove organic material with a hand towel and locally approved disinfectant.

Performance Measures

<u>GO</u>	<u>NO</u> <u>GO</u>
-----------	------------------------

- | | | |
|---|-------|-------|
| 1. Prepared for cleaning. | _____ | _____ |
| a. Gathered cleaning material/equipment. | | |
| b. Put on nonsterile gloves, eye protection, and mask.* | | |
| 2. Cleaned exam/operating room. | _____ | _____ |
| a. Identified and accounted for all sharps.* | | |
| b. Placed sharps in sharps container.* | | |
| c. Ensured that all specimens were annotated and sent to the specimen lab.* | | |
| d. Rinsed all excess organic material from instruments and wiped dry with hand towel. | | |
| e. Placed instruments in dirty instrument container. | | |

Performance Measures**GO****NO
GO**

- f. Placed all linen in dirty linen basket.
- g. Placed disposable drapes in trash receptacle.
- h. Removed suction canister and placed in biohazard bag.
- i. Removed trash container from room and placed in trash pickup area.
- j. Removed biohazard bag from room and placed in biohazard pickup area.
- k. Removed all instruments to dirty instrument area.*
- l. Wiped down surfaces for organic material with a hand towel and locally approved disinfectant.*

Evaluation Guidance: Score each soldier according to the performance measures in the evaluation guide. Unless otherwise stated in the task summary, the soldier must pass all performance measures to be rated a GO. Some performance measures have substeps listed as a quick reference for the evaluator. The substeps denoted with an * are the only substeps absolutely necessary to get a GO for that performance measure. If the soldier fails any step, show what was done wrong and how to do it correctly. Have the soldier perform the task until it is done correctly.

References None

APPENDIX A

FIELD EXPEDIENT SQUAD BOOK

FIELD EXPEDIENT SQUAD BOOK												
For use of this form, see AR 350-57; the proponent agency is ODCSOPS						SHEET 1 OF 3						
USER APPLICATION		SOLDIER'S NAME										
TASK NUMBER AND SHORT TITLE	GO	NO-GO	GO	NO-GO	GO	NO-GO	GO	NO-GO	GO	NO-GO	GO	NO-GO
081-830-2000 Validate Functioning of the Manual Audiometer												
081-830-2004 Validate Functioning of the DOEHRS-HC System												
081-830-2001 Complete Pure-Tone and Speech Diagnostic Audiometry												
081-830-2002 Conduct Acoustic Immittance Measurements												
081-830-2008 Perform Otoacoustic Emission (OAE) Screening												
081-830-2005 Conduct Monitoring Audiometry												
081-830-2003 Fit Preformed Earplugs												
081-830-2006 Produce a Hearing Aid Earmold Impression												
081-830-2007 Repair Minor Hearing Aid Deficiencies												
081-830-2012 Perform Anterior Packing												
081-830-2015 Perform Cerumenectomy												
081-830-2017 Perform Ear Irrigation in an ENT Clinic												
081-830-2018 Perform Kobrak Caloric Test												

DA FORM 5165-R, SEP 85

EDITION OF DEC 82 IS OBSOLETE

[illegible]

EDITION OF DEC 82 IS OBSOLETE

DA FORM 5165-R, SEP 85

[illegible]

GLOSSARY

1SG	first sergeant
AAR	after action review
AC	air conduction
ACCP	The Army Correspondence Course Program

Army Training and Evaluation Program (ARTEP).

The Army's collective training program that establishes unit training objectives critical to unit survival and performance in combat. They combine the training and the evaluation process into one integrated function. The ARTEP is a training program and not a test. The sole purpose of external evaluation under this program is to diagnose unit requirements for future training.

ART	acoustic reflex threshold
ARTEP	Army Training and Evaluation Program
ASI	additional skill identifier

Battle focus.

A process to guide the planning, execution, and assessment of the organization's training program to ensure they train as they are going to fight.

BC	bone conduction
CBRNE	chemical, biological, radiological, nuclear, and high-yield explosive
cc	cubic centimeter

Collective training.

Training, either in institutions or units, that prepares cohesive teams and units to accomplish their combined arms and service missions on the battlefield.

Common task.

A critical task that is performed by every soldier in a specific skill level regardless of MOS.

Cross training.

The systematic training of a soldier on tasks related to another duty position within the same military occupational specialty or tasks related to a secondary military occupational specialty at the same skill level.

CSM	command sergeant major
CTA	cotton tipped applicator
CTC	combat training center or combined training center

DA	Department of the Army
dB HL	hearing level in decibels
dB SL	sensation level in decibels
dB	decibel
DOB	date of birth
DOEHRS-HC	Defense Occupational and Environmental Health Readiness System - Hearing Conservation
EAC	external auditory canal
EKG	electrocardiogram/electrocardiograph
EM	effective masking
ENT	ear, nose, and throat
FNA	fine needle aspiration
ga	gauge
HA	hearing aid
HPD	hearing protection device
Hz	hertz (cycles per second)
IA	interaural attenuation
IAW	in accordance with

Individual training.

Training which prepares the soldier to perform specified duties or tasks related to the assigned duty position or subsequent duty positions and skill levels.

Integration training.

The completion of initial entry training in skill level 1 tasks for an individual newly arrived in a unit, but limited specifically to tasks associated with the mission, organization, and equipment of the unit to which the individual is assigned. It may be conducted by the unit using training materials supplied by the school, by troop schools, or by inservice or contract mobile training teams. In all cases, this training is supported by the school proponent.

IV	intravenous
MACOM	major Army command

Merger training.

Training that prepares noncommissioned officers to supervise one or more different military occupational specialties at lower skill levels when they advance to a higher level in their career management field.

METL mission essential task list

Mission essential task list.

A compilation of collective mission essential tasks which must be successfully performed if an organization is to accomplish its wartime mission(s).

ml or mL milliliter

MOOTW military operations other than war (joint only)

MOS military occupational specialty

MOSC military occupational specialty code

NBC nuclear, biological, and chemical

NCO noncommissioned officer

NFH noise free hours

NTE nontest ear

OAE otoacoustic emission

PB phonetically balanced

PI performance intensity

PPE personal protective equipment

PRN as needed (usually medication)

RAS reflex-activating signal

RC Reserve Component

Self-development.

Self-development is a planned, progressive, and sequential program followed by leaders to enhance and sustain their military competencies. Self-development consists of individual study, research, professional reading, practice, and self-assessment.

SFA speech frequency average

SL squad leader; skill level

SM soldier's manual

SMCT	soldier's manual of common tasks
SOAP	subjective, objective, analysis, plan
SOP	standing operating procedures
SRT	speech recognition threshold
SSN	social security number
STP	soldier training publication
STS	significant threshold shift

Sustainment training.

The provision of training to maintain the minimum acceptable level of proficiency required to accomplish a critical task.

TADSS	training aids, devices, simulators, and simulations
TE	test ear
TG	trainer's guide
TID	three times daily
TM	tympanic membrane

Train-up.

The process of increasing the skills and knowledge of an individual to a higher skill level in the appropriate MOS. It may involve certification.

TTP	Tactics, Techniques, and Procedures
------------	-------------------------------------

Unit training.

Training (individual, collective, and joint or combined) conducted in a unit.

UV	ultraviolet
VC	volume control
WRS	word recognition scores

REFERENCES

New reference material is being published all the time. Present references, as listed below may become obsolete. To keep up-to-date, see [DA Pam 25-30](#). Many of these publications and forms are available in electronic format from the sites listed below:

[Army Publishing Directorate](#)

Administrative Departmental Publications and Forms
(ARs, Cirs, Pams, OFs, SFs, DD & DA Forms)

[Individual Training Portal – RDL Services](#)

Army Doctrinal and Training Publications
(FMs, PBs, TCs, STPs)

Required Publications

Required publications are sources that are listed in task conditions statements and are required for the soldier to perform the task.

Army Regulations

AR 40-501 Standards of Medical Fitness 29 August 2003

Department of Army Pamphlets

DA PAM 40-501 Hearing Conservation Program 10 December 1998

Other Product Types

DD FORM 2217 Biological Audiometer Calibration Check

Special Texts

EXERCISES IN AUDIOMETRY Martin, Exercises in Audiometry: A Laboratory Manual, 1st Edition, Pearson Education (ISBN: 0205268250)
20 November 1997

Related Publications

Related publications are sources of additional information. They are not required in order to perform the tasks in this manual.

Department of Army Forms

DA FORM 2028 Recommended Changes to Publications and Blank Forms
DA FORM 5164-R Hands-On Evaluation
DA FORM 5165-R Field Expedient Squad Book

Department of Army Pamphlets

DA PAM 350-59 Army Correspondence Course Program Catalog
1 October 2002

Department of Army Visual Information Production and Distribution Program

DA POSTER 40-501B	Foam Earplugs 1 April 1991
DA POSTER 40-501C	For Maximum Protection and Comfort, Insert Single Flange Earplugs 1 April 1991
DA POSTER 40-501D	For Maximum Protection and Comfort, Insert Triple Flange Earplugs 1 April 1991
DA POSTER 40-501E	Earplug Seating Device and Carrying Case 1 April 1991
DA POSTER 40-501G	Ear Canal Caps: General Information 1 April 1991
DA POSTER 40-501H	Earplugs: General Information 1 April 1991
DA POSTER 40-501M	Well-Fitted and Properly Inserted Earplugs

Field Manuals

FM 7-0	Training the Force 22 October 2002
FM 7-1	Battle Focused Training 15 September 2003

Other Product Types

DD FORM 2163	Medical Equipment Verification/Certification
DD FORM 2215	Reference Audiogram
DD FORM 2216	Hearing Conservation Data

Soldier Training Publications

STP 21-1-SMCT	Soldier's Manual of Common Tasks Skill Level 1 31 August 2003
STP 21-24-SMCT	Soldier's Manual of Common Tasks (SMCT) Skill Levels 2-4 31 August 2003

Special Texts

DEWEESE & SAUNDERS	Schuller & Schleuning, DeWeese & Saunders' Otolaryngology - Head and Neck Surgery, 8th Edition, Mosby-Year Book (ISBN: 0801668425) 1 December 1993
INTRODUCTION TO AUDIOLOGY	Martin & Clark, Introduction to Audiology, 8th Edition, Pearson Education (ISBN: 0205366414) 2 August 2002